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PREFACE

THIS book is one of the REFRESHER SERIES, and its aim is to refresh the reader's knowledge of elementary economic theory. No attempt has been made to introduce any original theories but rather to concentrate attention on revising knowledge already acquired and, in some cases, to bring it up to date. In doing this, the size of the present work has necessarily imposed limitations on the scope of the revision attempted. The author must, therefore, duly acknowledge himself conscience-stricken as a result of what may be considered serious omissions.

The present book should not be used as a substitute for the more thorough treatment of the subject such as will be found in any of the volumes recommended in Appendix I. The author is sincerely aware of his debt to the writers of these works and gratefully acknowledges the extent to which he has freely drawn upon them both as a teacher and as a writer on the subject.

In conclusion, one personal acknowledgment. In the preparation of any book, however modest, some sacrifice of social life is involved, and the author takes this opportunity of expressing his grateful thanks to his wife for her patient forbearance and encouragement but for which the present work would not have been possible.

A. H. T.

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Chapter 1

WHAT IS ECONOMICS?

THE QUESTION

What is Economics?

THE ANSWER

There is a general impression that as economists concern themselves with problems concerning wealth in its relation to material welfare, by implication, this defines the scope of economic inquiry. In fact, Professor Cannan in his work, *Wealth*, defines economics in the following terms. " Economics ", he says, " is the study of the causes on which the material welfare of human beings depends."

Such a definition is, no doubt, attractive, but lacks precision and fails to give universality to a study which has the pretensions of being a science. For example, a particular good or service may contribute to material welfare at one point of time and be actually detrimental to material welfare at another. Thus a drug may be the instrument of material welfare when used as medicine, and have exactly the opposite effect when used to satisfy a craving induced by a developed vice.

Again, the conception of economics as being concerned with material welfare is unduly restrictive. It excludes from consideration certain activities which, while not contributing to material welfare, have consequences which are certainly economic in their effect on society as a whole. Thus if a workman is given the choice of working on a Sunday for double pay but chooses to go to church instead, his action would not fall within the scope of economic inquiry when that inquiry is restricted to matters affecting the material welfare of human beings. This contention is

quite untenable when it is pointed out that not only is society ultimately deprived of a quantity of goods and services, but the worker and his family have sacrificed a certain amount of purchasing power by reason of this decision. It is clear that in such a decision there are important economic ramifications the significance of which cannot be avoided in any economic discussion.

These are only a few of the reasons why most modern economists have sought to find a more fundamental principle upon which to establish the definition of economics. They have found the universality they were seeking in the fact that man is a bundle of unsatisfied wants or desires. In fact, our wants are insatiable in the sense that as soon as we satisfy one want, another arises to take its place. These wants range from the elementary or instinctive wants to those which, with the development of modern society, are no longer instinctive in character. The means or resources by which these wants and desires are satisfied are definitely limited relative to the extent and nature of these wants. It is true that with what we call economic progress our resources have increased but so have our wants. In fact, it might be true to say that economic progress postulates the creation of new wants and desires.

This is, therefore, the fundamental principle upon which modern economic science takes its stand, namely, the scarcity of means (or resources) relative to the wants or desires which compete for satisfaction. Further, this fact is so true as to be independent of time, place, and any stage of civilization. It holds good whether we are concerned with the activities of the individual or society as a whole. From this point the economist reasons that human wants (or ends), being without limit, resources are always relatively scarce and consequently a choice between the ends to be satisfied must always be made. In other words, these scarce resources have to be brought into relationship with

unlimited ends and this is what is meant by the expression "Economic Activity". We cannot do better, therefore, in defining economics than to quote the words of Professor L. Robbins,[1] who states that

> Economics is the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses.

It will be realized that this definition indicates the very important fact that, in the allocation of scarce means as between unlimited ends, the nature of the ends themselves is subject to no examination. Thus if a workman prefers to worship in a church on a Sunday instead of working in a factory for double pay, we say that as this conduct involves the giving up of other desired alternatives, such behaviour comes within the scope of economic inquiry.

THE QUESTION

What are Economic Laws?

THE ANSWER

In the study of the behaviour of individuals who are concerned with this allocation of scarce means to unlimited ends, the economist perceives that there are certain tendencies in this behaviour about which it is possible to generalize. These generalizations or statements of principle are called "Economic Laws", an expression which, in the view of many, is quite misleading. They point out that by a "law" we understand a statement which is both profound and immutable in its relation to the principle it represents and is also invariable in operation.

Now economic laws are profound in the sense that they deal with the basic aspects of human behaviour, but they lack the precision which accompanies certain types of scientific laws. This is obvious when it is recalled that the

[1] *The Nature and Significance of Economic Theory.*

subject-matter of economics is the behaviour of human beings—a very inexact material. In order to formulate laws we have to assume that the principles operate without being affected by any disturbing factors. For example, we assume that persons will follow a line of behaviour which is rational in the economic sense. In other words, we assume that persons in having to choose between different alternatives will choose that which yields them the maximum advantage or the least possible disadvantage. All kinds of influences will intrude in order to prevent this and, as examples, we can mention habit, sentiment, and prejudice, which intervene and invalidate the consequences we have anticipated from the operation of our law. This is the reason why most economists have to qualify their statements by declaring that the tendency will follow certain lines, "other things being equal".

This is not to say that these generalizations of economics which we call "laws" have no value. They emphasize principles which must always be considered.

Chapter 2

HUMAN WANTS

THE QUESTION

In discussing the nature of human wants, what principles are observed?

THE ANSWER

It has already been stated that human wants are diverse in their nature, but there are, in fact, certain underlying characteristics which are common to all of them. They are capable of being satisfied quickly: thus, the want or desire for food when we are hungry is generally satisfied by the consumption of a meal, and if we are normal we do not continue to derive the same amount of satisfaction from a continuous consumption of food. This fact gives rise to an important law in economics known as the Law of Diminishing Marginal Utility. This law helps to explain why, in the absence of any form of rationing, a housewife would buy, say, three pounds of sugar if the price were 6*d*. per pound: probably two pounds if the price rose to 9*d*. per pound: and only one pound if the price were 1*s*. 6*d*. per pound.

In order to understand the law and its implications, it must be noted that "utility" is defined in economics as the "power or quality possessed by a commodity to satisfy a want or desire". With this definition clearly in mind, let us imagine the housewife in buying her weekly provision of groceries is considering the amount of sugar she will purchase. She reasons that she will have one pound at least for the most urgent requirements of her family, e.g. for the purpose of sweetening drinks like tea and coffee; then she might buy a further pound for making cakes and

puddings; and finally, as the price is low, she may even buy a third pound for making jam or confectionery. It is evident that the principle which emerges is this: in her demand for sugar the housewife arranges the units (in this case, pounds of sugar) in order of preference. She will only buy the three pounds if the price is low enough (say 6*d.* per pound), because at this price she cannot think of any other commodity giving her, as we say in ordinary language, "better value for money for the price". In technical language we should explain it by saying that the utility given by the three pounds of sugar at the price of 6*d.* per pound is greater than would be obtained by the purchase of other commodities at the same price.

Now let us say that the price of sugar, for some reason, increases from 6*d.* to 9*d.* The position can now be explained as follows. If the housewife now wishes to buy three pounds of sugar, her total outlay will be 2*s.* 3*d.*, whereas formerly it was 1*s.* 6*d.* She will now have to decide whether to buy two pounds only and spend the 9*d.* she would have to spend on the three pounds of sugar on some other commodity which will yield greater satisfaction. In other words, in having to choose between a third pound of sugar and some other commodity (at the higher price now ruling), she may choose the other commodity because it has the power of yielding greater satisfaction than the third pound of sugar.

In this way we can appreciate that all persons, either consciously or subconsciously, in laying out their income (or part of it) are constantly balancing alternatives as regards their capacity for yielding utility so as to derive the maximum possible satisfaction from their expenditure.

To return to the Law of Diminishing Marginal Utility, the more we have of a commodity the less is the utility of another unit (in the case of most commodities). Thus if we are very thirsty and we buy a drink to assuage our thirst,

because of the urgency of our desire, the drink will yield a great deal of satisfaction. After the consumption of this drink, however, the prospect of a second drink will not be so inviting because our want or desire is partially satisfied, and this is the case of most commodities. As an illustration, imagine that we have, a week or two before Christmas, expressed within the hearing of our family a desire for a fountain-pen. Now imagine on Christmas morning opening up the parcels containing the Christmas presents. If the first parcel we open yields a fountain-pen, we should probably experience a great deal of satisfaction. If we now open a second parcel and that yields a fountain-pen from another member of our family, we might feel appreciative, but our sense of satisfaction would not be so acute, as our want has already been satisfied. In fact, a third pen, as a present, would most likely yield no satisfaction at all.

From this example it will be seen that in the case of fountain-pens this utility decreases with each one which is added to our existing stock.

This principle is true not only of fountain-pens but of practically every commodity. It is sometimes said that money, owing to the extensive variety of commodities and services it commands, is an exception to the law. A little thought will convince us that this is not so: for example, take two persons who we will describe as *A* and *B*. *A*'s income as a director of a business is £2,000 per annum, while *B*'s income as a clerk for the same business is £200 per annum. If these two incomes are reduced by 10% so that the deduction in the case of *A* is £200 and in the case of *B* £20, it is contended that *B* with his remaining income of £180 compared with *A* (with his income of £1,800) is living much nearer the margin of bare existence than is the latter, and the loss of £20 from his income is more serious to his welfare than is the loss of £200 in the case of *A*.

This explains the fatuity of the remarks of Government

spokesmen, who, during the time of financial stringency, urging a reduction in the salaries of State employees by a uniform rate of, say, 10%, and try to justify such a procedure on the grounds of equality of sacrifice. Such arguments strengthen the case for the study of economics.

It would not be true to claim that whilst money represents only an apparent exception to the Law of Diminishing Marginal Utility, that there are no real exceptions. A little reflection will convince us that there are some abnormal persons or that there are certain commodities the consumption of which tends to excite further desire. In this category we can place drugs like opium and morphia, the consumption of which, in the case of some persons, develops into a vice which causes them to demand increasing quantities. It might be true to say that in some cases the same is true of alcoholic drinks.

Thus to summarize, the Law of Diminishing Marginal Utility expresses a basic principle of human behaviour to which money is only an *apparent* exception, but of which goods like drugs and alcoholic liquor may form *real* exceptions.

THE QUESTION

What is understood by Value and Price?

THE ANSWER

As the exchange of goods and service is a fundamental condition for the existence of modern economic society, it is necessary to say something of value and of price. Value can be defined as

> The power of a particular good or service to command other goods in peaceful and voluntary exchange.

In effect, when we say that a thing, whether a good or service, is "worth so much", we are commenting on the particular ratio at which it will exchange for other goods or

services. In modern society, however, we rarely exchange goods directly against other goods. We make use of a medium of exchange—money. Thus we sell goods or services for money, which we use to purchase other goods or services. In doing this we express the value or the ratio at which exchange is taking place in terms of money. That is to say, we refer to the *price* of goods or services. In this way, price can be considered as:

> The value of a commodity or service measured in terms of the standard monetary unit.

At first sight, value and price appear to be synonymous terms. For all practical purposes they are, with these differences. As we have seen, exchange *may* take place without the intervention of the monetary media; and, further, the monetary system of any country may be subject to mismanagement. In the latter case, an increase may take place in the amount of money without any corresponding increase in the sum total of goods and services being offered against money. Prices rise as a result of people having more money, being compelled to offer more of it for existing goods and services, and so cause prices to rise. Thus prices—the value of goods expressed in terms of money—are higher, but the value of the goods—the rate at which they would exchange against each—will not have altered.

It now remains to examine the underlying principles which determine the prices of goods.

THE QUESTION

What are the conditions underlying Demand?

THE ANSWER

In a previous section mention was made of marginal utility. Briefly, it was explained that the amount of a commodity we are willing to purchase at a particular price at any given point of time will depend on the marginal

utility of the commodity to us. Our wants are satiable, and a desire for a good will be partially satisfied by certain amounts of the good. Now the effect of marginal utility on price can be explained in this way. Let us return to our example of sugar; we saw that the housewife would be willing to pay 1*s.* 6*d.* for one pound rather than dispense with it altogether. If she were now offered a *second* pound, her more immediate want having been satisfied by the pound she has purchased, she will not be willing to pay 1*s.* 6*d.* for the *second* pound, but some lower price; and, finally, if she were now offered a *third* pound, she would only take it if it were offered to her at 6*d.* per pound, as her desire for sugar having been almost satisfied by the two pounds she has already bought, she can get greater alternative satisfaction by acquiring other foods with her purchasing power. We now see that owing to the principle of Diminishing Marginal Utility, if the pounds of sugar were offered separately to the housewife, the price of each pound might be as follows:

1st	pound	of	sugar	1*s.* 6*d.*
2nd	,,	,,	,,	9*d.*
3rd	,,	,,	,,	6*d.*

It will be appreciated that this way of expressing the transaction is very artificial and quite divorced from practical reality, but this is only done in order to make the underlying principle clearer. In point of actual fact, a housewife entering the grocery store goes there with the fact already established in her mind that *three* pounds of sugar will meet her requirements. Now if the seller wishes to dispose of three pounds of sugar to her he will have to sell them at the *price of* 6*d. per pound.* This is obvious from the fact that each unit of sugar is a perfect substitute for any other pound of sugar in the stock and, therefore, any pound of sugar *may* be the marginal unit, and it follows that the utility of such a unit is the marginal utility of the stock, namely,

three pounds. The price at which the seller must sell in order to dispose of the stock is the price of the unit in its least urgent use, namely, 6*d.*

At this point it is essential that we grasp the fact that some people, e.g., diabetics, will probably purchase no sugar, whatever its price. We can say, therefore, that for every commodity there is a given demand arising from the want or desire for that commodity. The only way in which this want or desire receives its outward expression is by the amount of money people are willing to pay for the good in question. In other words, by the amount of satisfaction they are willing to sacrifice or forgo in other directions in order to obtain it. Thus at a very high price we would probably find a few people willing to pay that price rather than go without it, because their estimates of the marginal utility of the food are very high. As the price is reduced, more and more people desiring the food, but whose estimates of its marginal utility are lower, will be brought into the market.

We can express this relationship between prices and the quantities that will be taken at these prices and which are based upon estimates of marginal utility in the following table (the figures are quite arbitrary and are for the purpose of illustration only).

Price per lb.	*Demand in lbs.*
2*s.* 6*d.*	100
2*s.* 3*d.*	400
2*s.* 0*d.*	800
1*s.* 9*d.*	1,200
1*s.* 6*d.*	1,750
1*s.* 3*d.*	2,250
1*s.* 0*d.*	2,750
9*d.*	3,400
6*d.*	4,400
3*d.*	6,000

This schedule showing the relationship between prices and the amounts of the goods that will be taken at those prices is known as the demand schedule and can be illustrated by means of a diagram (Fig. 1). If we take the two axes, *YO* being the vertical axis along which we measure prices

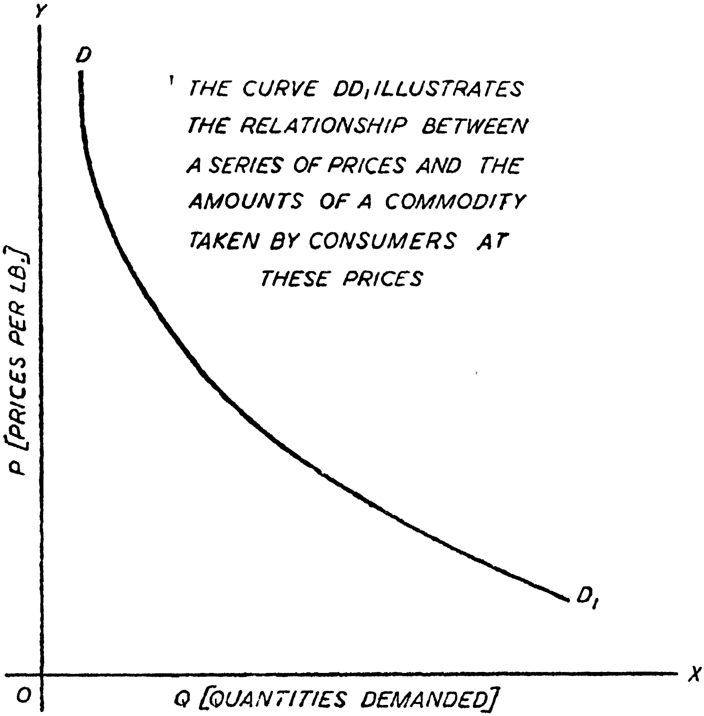

FIG. 1.

(*P*): *XO* is the horizontal axis along which is measured the quantities demanded (*Q*). The line DD_1 represents the demand curve, i.e. the curve expressing the relationship between prices and quantities. This curve slopes downwards from left to right, as we would expect, and this is always the tendency of the demand curve.

We are now in a position to formulate the so-called law of demand, which is no more than a statement of tendency. It can be expressed in the following words :

> Given the same conditions of demand, the quantities of a commodity which will be purchased tend to vary inversely with the price of the commodity.

In other words, the higher the price the smaller the quantity taken by the purchasers from the market, and conversely. In stating this law, we are making very important assumptions when we say, " Given the same conditions of demand." Thus among other things we assume :

(*a*) That people's tastes remain the same ;

(*b*) That people's incomes remain the same ;

(*c*) That the prices of other goods remain the same ; and

(*d*) That no new effective substitute for the commodity is discovered.

THE QUESTION

What is meant by Elasticity of Demand? Has it any practical significance?

THE ANSWER

We have already noted in the case of a given commodity the way in which the quantities demanded respond to price changes. It will be appreciated that in the case of those necessary commodities of life such as bread, the amounts demanded will not vary very substantially with changes in the price. At a high price, buyers will tend to forgo other things rather than do without the necessity (whatever it may be) ; at lower prices, people having satisfied their desire for the necessity will turn to the purchase of other things. In other words, in the case of a commodity like bread, the amount demanded will remain fairly constant over a fairly wide range of prices.

On the other hand, in the case of goods of a luxury

character, if prices rise at all appreciably, demand will fall off, and conversely. This responsiveness on the part of the amounts demanded to changes in price is known technically as the " Elasticity of Demand ". The principle which is represented by this term can be stated as follows :

(*a*) Demand is elastic if a *small* change in price causes a *correspondingly greater* change in the amount demanded.

(*b*) Demand is said to be inelastic when demand remains almost constant over a series of price changes.

We can illustrate this principle by means of diagrams, thus :

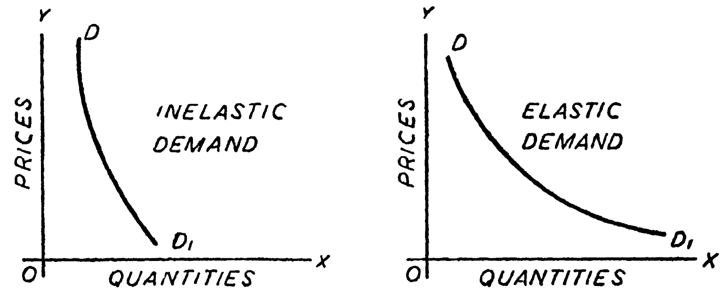

FIG. 2.

It must be emphasized that elastic and inelastic demands are differences of degree and are not capable of exact measurement, but are capable of comparison.

Various factors determine whether, in the case of a particular good, demand is elastic or inelastic.

Demand is elastic when :

(*a*) Good substitutes are available in adequate quantities.

(*b*) Prices, relative to other goods, are high.

Demand is inelastic when :

(*a*) The good is almost a necessity and no good substitutes are available.

(*b*) The price is very low or very high.

(*c*) The good is " important by being unimportant ".

(This is explained by Henderson in his *Supply and Demand* as the virtue of certain commodities such as salt, sewing-cotton, etc., which, although they are almost necessities, in relation to our own total outlay require an infinitesimal part of our income for their acquisition.)

The recognition of the principle of elasticity of demand becomes essential in business practice and in the wider sphere of public finance. For example, take the case of a manufacturer who contemplates putting a new product on the market. He will have before him his estimated costs of production, and in fixing what is to be the selling price he will have to keep in mind the income of the purchasers who will form his market; the existence or otherwise of substitutes; the proposed selling price in relation to other similar goods: all the factors, as we have already seen, which go to determine the elasticity of demand.

In the case of public finance the Chancellor of the Exchequer will, in considering whether to impose a new tax on a commodity, have to ascertain whether the demand for it is elastic or inelastic. If the demand is inelastic he can safely impose a tax within limits, after which demand will decrease. Failure to realize this fact and to ascertain these limits may mean that the demand will fall off to such an extent as to cause unemployment of economic resources. As an example, a few years ago, the tax on beer was increased to such an extent that the demand fell to a level at which the net revenue accruing to the Treasury was actually less than the revenue from the commodity before the tax was increased!

THE QUESTION

What are the conditions underlying Supply?

THE ANSWER

In examining the conditions which underlie supply we are faced with the fact that it will have to be related to

various periods which can be identified as follows: In the first place there is the "market supply". This period, for all practical purposes, is that in which the supply may be considered as fixed. In other words, it refers to the sale of goods already produced and in existence.

Secondly, there is the "short period", that is to say, the period required in order to place supplies of goods on the market within the limits of the capacity of the plant and machinery already in existence and devoted to the production of the particular commodity.

With regard to the first of these periods, the supply is already in existence, and theoretically there should be no absolute minimum below which the sellers would refuse to sell in order to get rid of the stocks they hold. If the buyers will not buy the goods at the price the sellers are charging, the latter will have no alternative, if they wish to dispose of their goods, but to lower their prices until the stocks of goods are exhausted. The dominant factors in price-determination in the case of market supply are the conditions underlying demand. To put the matter in another way, *given the demand*, the eagerness of the sellers to dispose of all or part of their stocks of goods will be the main factor governing the prices that will be charged.

It must not be concluded, however, from what has already been said, that the buyers can force the sellers to accept any price they choose. The explanation of this lies in the existence of what are known technically as *sellers' reservation prices.* These reservation prices are prices below which sellers will not sell owing to a variety of circumstances. In discussing these circumstances, it must be remarked that if the commodity is of a perishable nature, then the reservation price is likely to be a low one. Again, if, because of the relatively low price at which the buyers will purchase, the goods will have to be warehoused or stored for a fairly long period of time, then obviously the cost of warehousing

will have to be considered by the seller in deciding whether to sell his goods at the price ruling. Another dominant factor will be the sellers' need for cash. Finally, the seller will have to consider carefully the length of time it will take for a new supply to reach the market. The longer the period before a new supply can reach the market the higher is likely to be the sellers' reservation price. These are a few of the main criteria which go to determine the sellers' reservation prices. Now the effect of these reservation prices on the determination of prices is that they induce the sellers to withhold their goods from the market unless these reservation prices are satisfied. Thus the effect on market supply is exactly the same as if the sellers were buying from the market at these reservation prices. There is, therefore, in the case of market supply, no fundamental difference in the psychology of the buyer or seller. For the buyer will be motivated by the factors of marginal utility, while the seller, by not disposing of the goods at the price ruling because it does not conform to his reservation price, probably feels that his estimate of the marginal utility of the goods will be met at some future date.

In the short run, quite different underlying factors are at work, the most important of which is the influence of costs of production. Let us examine the exact nature of these costs of production. In the first place, it will be agreed that, at any price ruling, the supplies of a commodity coming on to the market will be determined by the costs at which the producers can produce the goods, and these will vary with the efficiency of the various businesses engaged in the production of the commodity. These costs fall into two main groups, namely, (*a*) Fixed Costs ; and (*b*) Variable Costs. Fixed costs are those which remain relatively unchanged over given levels of output and will include such items as rents, rates, and taxes, wages of foremen, supervisors and the salaries of management; sometimes called

overhead expenses. Variable costs are those which will vary directly with output and will include the costs of the materials and labour directly used in the production of the goods in question. It follows that in the case of fixed costs, the greater the output, the smaller the amount of the fixed cost each unit of output will have to bear: selling price can be reduced and we may conclude that the influence of fixed costs on supply will be to cause it to be the maximum that is possible within the limits imposed by the efficiency of the productive unit, i.e. the optimum. With variable costs, however, a limiting factor shows itself, viz. the operation of the principle expressed by the Law of Diminishing Returns. This principle was originally thought to apply to land to which units of labour and capital were being applied. It was found that, at first, as labour and capital were applied, the return became proportionally greater until a point was reached, known technically as the "optimum" point, after which further applications resulted in returns which tended now to diminish proportionately to the labour and capital invested in the land. Modern theory no longer conceives this principle as only applying to land and the agricultural industry: in point of fact it applies to all combinations of the factors of production (Land, Labour, Capital, and Organization) in which variable amounts of certain of these factors are applied to a constant amount of one factor. Now, the costs of production are ultimately nothing more than the expenses paid for the use of these factors, and in any given unit of production, e.g. a factory or workshop, certain of the factors are fixed, e.g. land or capital. If, therefore, it is desired to increase output, this can only be done by altering the combination of existing factors in such a way that more of those factors, the amounts of which can be varied, are applied to the constant factor. Thus side by side with the stimulus to expanding output so as to spread the overhead expenses

over as great an output as possible in order to reduce costs and increase the amount of the commodity that the market will take, there will be a limit to this expansion imposed by the operation of the principle of Diminishing Returns.

Before leaving this subject of costs of production it is necessary to examine further their ultimate nature. It is evident that if we borrow liquid capital, e.g. money, we must pay for using it, and this price must be such as will induce it to be devoted to our particular task rather than seek employment elsewhere. The same applies to all the other factors of production, and we may safely conclude that ultimately the money costs of production of a unit of any commodity can be defined as:

> "The amount of money necessary to induce the factors of production to be devoted to this particular task rather than to seek employment elsewhere."

From what has been said, with any given unit of production there will exist conditions which will determine the costs of production, and these costs will, according to the peculiar organization of each unit, vary from unit to unit.

Thus at any given price level it will be the costs of production which determine the amount placed on the market at that price. This fact can be explained in the following way: let us assume that in any given line of production we have five different firms of varying size and efficiency, so that they can produce the unit at the following costs of production including normal profit. A = 1*s*. per unit; B = 1*s*. 3*d*. per unit; C = 1*s*. 6*d*. per unit; D = 1*s*. 9*d*. per unit; and E = 2*s*. per unit. If the market price for the unit is 1*s*. 7*d*. per unit, then only A, B, and C will find it possible to put their output on the market. As the market price just clears C's expenses, C is the marginal producer. If now, for some reason, demand forces the market price up to 2*s*., then all five firms will be able to

place their goods on the market, and as it only just pays *E* to produce at the current price, *E* becomes the marginal producer.

We can now formulate the Law of Supply as follows:

> Given the same conditions of supply, the quantities of a commodity which will be sold tend to vary directly with the price of that commodity.

This can be put quite simply by stating that, the higher the price at which goods can be sold, the greater the quantity that producers will tend to put on the market. This can be illustrated by means of a diagram, as follows:

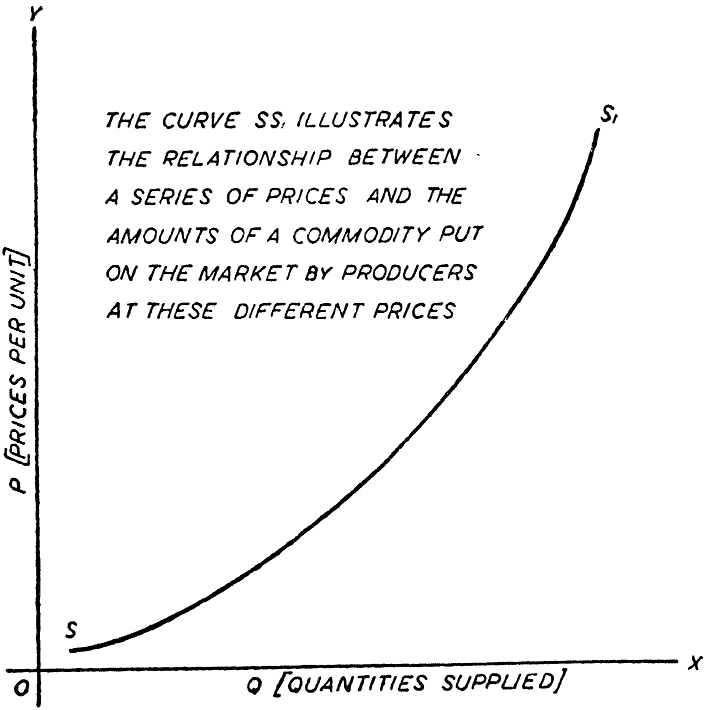

FIG. 3.

This is the reason why, in practice, producers in a monopolist position tend to restrict the amounts they put on the market, because a small supply will sell for a higher price than a larger amount.

THE QUESTION

What is (a) Joint Demand, (b) Supply, and (c) Composite Demand and (d) Supply?

THE ANSWER

(*a*) Joint Demand. In the process of production, various raw materials enter into the finished product. These different raw materials are said to be jointly demanded as the demand for each is derived from the ultimate demand for the final commodity into the production of which they enter. Thus coal and iron ore are jointly demanded in order to produce steel. From what has been said, it is evident that joint demand is practically universal in the sphere of the production of final products (i.e. those for final consumption). With regard to the relation between joint demand and price, if for any reason there is an increase in the demand for the ultimate product, then this will be reflected in the demand for the constituent products and their prices. As a result, that constituent which has a relatively inelastic supply will increase most in price and it will thus absorb a greater proportion of the increased price of the ultimate product. But it must be stated in conclusion that the conditions of joint demand will have no lasting effect on price.

(*b*) Joint Supply. It is invariably true that in the course of most production processes, various by-products emerge together with the ultimate product. In other words, we have a case of joint supply, i.e. two or more goods being derived from a common source. Even in the extractive industries we have beef and hides from the rearing of cattle; mutton and wool from sheep; cotton-lint and cotton-seeds

from the cotton plant. In examining the relation between joint supply and price we have first to recognize two important facts, namely:

(i) That the commodities derived from a common origin are forthcoming in what are more or less unvarying proportions to one another.

(ii) There is no similar connection between the separate demands for each of the commodities jointly produced.

It follows, therefore, that the total of the prices obtained for the individual joint products must be sufficient to cover their joint expenses of production, but the relative prices of the individual products are more difficult to assess, and lie outside the scope of this elementary discussion.

(*c*) COMPOSITE DEMAND. It is a characteristic fact to-day that one commodity has more than one use in production, and is therefore capable of being used in the manufacture of entirely different products. For example, leather is demanded for the manufacture of boots and shoes, handbags, travelling-trunks, and fancy leather goods. Again, steel is used in many industries such as building construction, engineering, ship-building. The demands for leather or steel in the cases already mentioned are competitive demands relative to one another, and it is this fact that gives us the clue to the problem of price determination in the case of products the demand for which is composite. If, for any reason, there is an increased demand for the commodity in one of its uses, e.g. boots and shoes, the immediate effect is to intensify the scarcity of the commodity in relation to its alternative uses and raise its price, although not, of course, equally. The extent of this increase in price will depend on the *elasticity of the supply* of the commodity in question. Thus in the case of steel, new supplies will be forthcoming fairly readily, but in the case of leather, depending ultimately on the supply of hides, new supplies will be put on the market only after

an appreciable lapse of time, and with difficulty. Where new supplies are easily forthcoming the rise in price will not be relatively great nor prolonged over a period of time. The more difficult it is to increase the supplies of the commodity in question, the greater will be the increase in price and the longer will be the duration of the increase.

(*d*) COMPOSITE SUPPLY. Composite supply exists when there are two or more products which satisfy the same need, e.g. tea, coffee, and cocoa: butter and margarine. In these examples it must be pointed out that no product is in reality a perfect substitute for another. If the supply of one commodity in a composite supply is increased, conditions of demand remaining the same, the price for it will fall, and at this lower price there will be a tendency for a greater quantity of it to be taken in the place of the other commodity or commodities, the supply of which for obvious reasons will now tend to diminish.

Chapter 3
PRODUCTION

THE QUESTION

What is meant by Production and what are the influences affecting it?

THE ANSWER

Up to now the term production has been used very often without any precise meaning being assigned to it. In economics, the term " production " is used to denote " all the processes by means of which man adapts natural resources in order to serve his needs ". This adaptation of natural resources to the needs of man involves a wide range of activities such as agriculture, mining, manufacture, the wholesale and retail trades, banking, insurance, and transport. It is clear from the meaning thus given to production that the term is not confined to those activities which result only in the emergence of tangible goods, otherwise we would be placed in the untenable position of repudiating the fact that the efforts of clerks, supervisors and foremen, singers, doctors, etc., contribute anything to the national well-being. In fact, all activities will be productive if they result in the production of goods possessing utility.

The volume of production in any community will be affected by many influences which act individually and in combination. There will be those natural influences which, generally speaking, are beyond the control of Man, and, for example, in the case of an agricultural economy, production will be affected by suitable weather conditions. In other cases, production will decline under the influence of natural catastrophes such as earthquakes, floods, dust-

storms. Man is constantly engaged in a struggle against these natural influences: he builds embankments against floods; he irrigates farming land subject to dry climate conditions; he practises crop rotation and uses artificial fertilizers.

Man's power over nature is also increased by inventions and new discoveries which have the ultimate effect of increasing the volume of production. In this connection it is necessary to acknowledge the part played by the system of general, technical, and commercial education, which, by increasing the knowledge of the community, tends to stimulate these inventions and discoveries and must be recognized as an ultimate and important contributory factor in production.

THE QUESTION

What is meant by Division of Labour?

THE ANSWER

The most characteristic feature of modern production is the part played by division of labour, the benefits of which were first pointed out by Adam Smith in his *Wealth of Nations*.

Division of labour is a form of co-operation. It can be defined as the process which occurs when several persons combine to perform a task by each doing something different, i.e. by specializing upon a certain part of the general task. The advantages of division of labour were fully analysed by Adam Smith when he recognized three reasons for the increase in output which is the result of such specialization. These reasons are:

(i) Increased dexterity and skill which comes from the continual practice of a single process, and which becomes almost automatic as less thought and concentration upon the movements involved become necessary.

(ii) There is a saving of time which would otherwise be lost in passing from one species of work to another.

(iii) There is the fullest utilization of the best and most efficient machinery which " facilitates and abridges labour ", thus enabling one man to do the work of many.

As productive technique has developed, a further advantage has now to be added to those already indicated, namely :

(iv) There is more opportunity for the classification of workpeople by capacity. In other words, it becomes possible to allocate people to different occupations according to physical capacity, skill and other qualities and thus take advantage of inherent capacities.

These advantages are not without corresponding disadvantages ; for example, where labour is highly specialized there is a tendency to certain occupational diseases. Thus, miners are by the nature of their occupation susceptible to silicosis and to the affliction of the eye known as miner's nystagmus. Further, there is no denying the fact that modern processes demanding nothing more than the constant repetition of a few simple movements fail to absorb the workers' mental and physical energies. There is the possibility that mental development may be stunted, and, in addition, the realization that mental and physical qualities are being frittered away may fail to arouse any interest in the work itself. This lack of incentive is an important factor in industrial unrest.

THE QUESTION

Can division of labour be extended indefinitely?

THE ANSWER

This question implies that there is an incentive to extend further the division of labour and make the constituent

parts of the processes of production even more specialized. The incentive is obviously a greater output, and much of the present great volume of production is the result of the practice of breaking down the processes involved in production into a large number of highly specialized component parts. There is, however, clearly a limit to this process. In the first place, the extent of the demand for a product will quite clearly determine the limit to which division of labour can be practised in the production of that commodity. This fact was also suggested by Adam Smith towards the end of the eighteenth century, but modern experience shows that the demand for most products can be extended almost indefinitely if the price is reduced sufficiently, and, insofar as this can be effected by more efficient methods of production based on an extension of the principle of the division of labour, there will be every incentive to increase the number of specialized processes. Secondly, the nature of the product will also, to a great extent, determine the limits to which division of labour can be effectively applied. For example, in the manufacture of cutlery, the processes involved in production are relatively few in number and generally involve skill of a peculiar or inherent character. In such cases there will be no advantage, even if it were possible, in breaking down these relatively few processes into a larger number of semi-skilled processes. Finally, the nature of the industry also places a limit on the application of methods of production based on the division of labour. Thus in farming, the final emergence of the product is a natural process, and, as a consequence, the agricultural labourer does not tend to be a specialist in any particular sphere of work. His occupation will vary with the seasons and it is difficult to see how production can be more effectively speeded up and remuneratively increased by making him a specialist.

Before leaving the question of the division of labour, it

is necessary to emphasize the fact that its existence as a fundamental characteristic of modern economic society has depended on the co-existence of a monetary medium which is absolutely essential in order to enable the necessary exchange of the efforts of specialist workers to be effected. Other points which should be noted are:

(*a*) Division of labour is synonymous with co-operation. Such co-operation is always active, though it is not necessarily conscious.

(*b*) The fact that division of labour has led to a high degree of specialization creates the necessity for some form of co-ordination of effort. Thus organization or management has emerged as a specialized function concerned with directing and co-ordinating the efforts of specialized components.

(*c*) Formerly, the producer both produced and marketed his products. In modern society, on the other hand, the function of marketing has tended to become separate and distinct from the function of production.

(*d*) Division of labour as now practised in modern economic society has made the productive process more "roundabout" and has lengthened the time involved. This has given rise to a great increase in the capital requirements of industry and commerce as a whole, and has, in turn, led to the appearance of the financier as a specialized economic unit.

THE QUESTION

What are the agents of production?

THE ANSWER

All the elements entering the productive process at any stage can be classified under one of the following headings by which we distinguish the agents of production. Conventionally these headings are:

1. Land.

2. Labour.
3. Capital.
4. Organization. (Sometimes known as the entrepreneurial function.)

As such, the classification possesses no particular virtue other than that of convenience, and even here there are certain inherent difficulties. For example, take the case of land, the word being used in the sense of the "original and indestructible powers of the soil"; for many generations, both labour, in the form of cultivation, and capital, in the form of fertilizers and agricultural implements and machinery, have been applied to land. To what extent will logic permit us to point the precise point of demarcation between land, labour, and capital in such a case? Again, take the case of labour; can we really compare the contribution to national wealth made by an unskilled labourer and, say, a doctor? This is not to cast any doubt upon the importance that each makes to the common good, but rather to ask whether the contribution of the doctor is not due very largely to the capital invested in his general education and training. The purpose in making these points is to enable us to keep our definitions as precise as is possible for the purposes of rational discussion.

THE QUESTION

What is land and what are the limits to the productivity of land?

THE ANSWER

For the purpose of economics, land is described as "All the gifts of nature, whether land, sea or air, which are used by man in production, however diverse these factors may be in character."

It will be appreciated from this description that the function of land is to provide raw materials for the productive process, and in doing so, it must be observed that

various conditions operate to determine the extent of the effectiveness of the contribution of land to national wealth. Thus, physical and climatic conditions will affect the natural fertility of agricultural land. Similarly, physical conditions have determined the extent of the mineral wealth. Other factors that we must consider are latitude and geographical environment. The great variations in the productiveness of land due to deficiencies under these headings are, to some extent, mitigated by human activity which, in the case of certain regions, the fertility of which is adversely affected by excessively dry conditions, may take the form of the construction of irrigation works such as are found in Egypt and some parts of the U.S.A. We must not, however, overlook other forms of human activity, such as improving the qualities of the soil by certain forms of cultivation, fertilization, and crop rotation. Finally, in connection with the provision of raw materials, there is another important factor to be considered, namely, geographical situation in relation to the world's markets. The wheat and cotton of the Punjab entered into world trade to an appreciable extent only with the opening of the Suez Canal. Australian and New Zealand lamb and mutton entered into trade with the development of refrigerating appliances. On the other hand, the immense coal resources of China have been exploited to a relatively small degree owing to their inaccessibility, although, given stable conditions and the economic incentive, there is no doubt that this drawback could be remedied.

THE QUESTION

In what way is the limitation to the productivity of land explained by the law of diminishing returns?

THE ANSWER

It has already been indicated that the natural productivity of land is capable of improvement and that this is generally

effected by the application of labour and capital to land.

The question naturally arises: Is there any limit to the extent to which the productivity of land can be improved by the application of labour and capital? In point of actual fact, towards the end of the eighteenth century, in France, a group of thinkers, known as Physiocrats, in dealing with problems which were largely economic in nature, pointed out that there existed a definite limit to which labour (and the same is true of capital) could be profitably applied to land. Their explanation has been elaborated into a principle known as the Law of Diminishing Returns, which can be expressed in the following terms. Let us assume that we have a piece of farming land and we wish to work it in such a way so as to get the greatest possible return.

In order to do this, we have to put labour (in the form of agricultural workers) and capital (in the form of fertilizers and machinery) to work on the land. Now the question is, how many labourers can we profitably employ, and how many units of capital can be profitably invested in the land? To make the position clear, let us assume that we can reduce the units of labour and capital to a common denominator, then our results might appear as follows:

Number of Units of Labour and Capital	*Total Output (Bushels of grain per acre)*	*Average Output (Bushels of grain per acre)*	*Marginal Output*
1	8	8	—
2	18	9	10
3	30	10	12
4	48	12	18
5	65	13	17
6	81	13½	16
7	91	13	10

These figures are quite arbitrary and are intended only

to illustrate the principle that is being discussed. The first column shows the units of labour and capital being added to the given piece of land in uniform increments with the effect on output as shown in the second column. The average output is obtained by dividing the total output by the number of units of labour and capital applied. The column headed "marginal output" indicates the contribution to total output by the addition of each unit of labour and capital. From this it will be seen that the highest marginal return is obtained when the fourth increment of labour and capital is applied to land, whereas the highest average return is obtained when the sixth unit is applied. Thus, it would pay under these conditions to apply labour and capital up to the sixth unit, i.e. the point of highest average return, in spite of the fact that the marginal returns have been decreasing. Beyond this point, notwithstanding the fact that the total output continues to increase, the output decreases *proportionately* to further applications of labour and capital.

It has already been admitted that the figures quoted are arbitrary and are used to illustrate the way in which the principle operates, but the truth of the principle is indisputable, otherwise it would be possible to grow sufficient wheat for the world's requirements on a few acres of land merely by applying sufficient units of labour and capital.

It must be pointed out that this conception is generally known as "static", as it applies to a particular state of affairs existing at a given point of time. This "static" condition can only be assumed to exist for the purpose of economic analysis. In doing that it is generally assumed that the operation of the law is isolated from all complicating factors such as are postulated for economic progress in any society. The opposite to "static" conditions are "dynamic" conditions, which are those actually existing in the everyday world and in which there is continual

evolution and growth making for change. The sources of change characteristic of dynamic conditions are:

(i) Growth of population;
(ii) Changes in the rate of accumulation of new capital;
(iii) Inventions and changes in the methods and technique of production;
(iv) Improvements in the methods of business organization;
(v) Changes in demand.

In conclusion, it now becomes possible to state the law of diminishing returns in the following terms:

> If successive equal doses of labour and capital are applied to a piece of land, sooner or later, the returns to each successive dose will diminish, provided that external conditions remain constant.

THE QUESTION

How is "Labour" defined in economic theory?

THE ANSWER

In attempting to define labour, we are faced with the difficulty that a series of mental or physical efforts may have different effects under different conditions. For example, compare the case of amateur and professional gardeners. We would quite rightly classify the efforts of the professional as labour in the economic sense, but what about the case of the amateur? He probably exacts as much, if not more, energy in the pursuit of his hobby, and we are therefore faced with the problem of distinguishing between the two kinds of efforts.

In the first place, we might agree that labour must consist of bodily and mental efforts directed to the production of goods and services, but there is one further point that must be explained, namely, that we can assume that in the case of the average worker, he undertakes the efforts he does in order to obtain an income in the form of a wage, salary

or fees. On the other hand, the amateur, whether he be concerned in gardening, photography, football or cricket, exerts the efforts he does in order to derive some pleasure from doing so, which can, from the objective point of view, be regarded as his reward. We are now in a position to formulate a definition of " labour ", in the economic sense, in the following terms :

> All mental or bodily effort which is undergone partly or wholly with a view to some good other than the pleasure derived directly from the work.

THE QUESTION

State what Malthus taught in regard to population, and consider any arguments that might be urged in opposition to his doctrine.

THE ANSWER

As war-time experience shows us, society is ultimately dependent upon man-power in relation to natural resources for its wealth. This can be put in another way by saying that the productivity of any society will depend on the supply of labour, which, in turn, ultimately depends on the total population. It is for this reason, among others, that the question of population has exercised the minds of economists and sociologists generally.

No discussion of population is possible without mention of the contribution of Malthus to our appreciation of the problem. It is true that the Malthusian doctrine is no longer accepted, but there is no doubt that his influence on subsequent thought is without question. Turning to the doctrine formulated by Malthus in his *Essay on the Principles of Population* written in 1798, the argument proceeds along the following lines.

Malthus assumed that the strongest of all man's innate desires is for marriage and for begetting a family, and that, generally speaking, this desire would be satisfied before any

others. It follows, therefore, that there is a strong tendency for population to increase at a rapid rate ; in fact, according to Malthus, more rapidly than the increase in the means of subsistence. He endeavoured to reduce this tendency to a mathematical formula by stating that whilst population tended to increase in what is known in mathematics as "geometrical progression", the means of subsistence increased only in arithmetical progression. The inevitable conclusion was that, sooner or later, population must outgrow the means of subsistence as represented by the minimum amount of food, clothing, and housing necessary to sustain life, unless this rapid growth is checked by some means. In order to anticipate any possible objection to this statement that the world, as it was then, was not over-populated, Malthus advanced the argument that two series of checks were in operation which prevented the world from being over-populated. He described them under the two headings of (i) Prudential checks and (ii) Positive checks.

(i) PRUDENTIAL CHECKS. Not every person was willing to assume the responsibility of married life and a family. On the other hand, there were frequent cases where persons having once married deliberately abstained from begetting a family.

(ii) POSITIVE CHECKS. There are always certain catastrophes, natural or otherwise, the effect of which is to reduce the size of the population. Such catastrophes take the form of war, floods, famine, disease and pestilence.

Malthus, in effect, concluded his doctrine by arguing that in spite of the operation of these checks, population tended naturally to increase, and that this tendency would keep the greater part of the population at the level of minimum subsistence.

At first sight these propositions of Malthus, although presenting us with a gloomy future, seem to contain a substantial element of truth, although, at the same time,

close examination will show that the doctrine is open to a number of very valid objections.

In the first place, history does not appear to support the conclusions of the Malthusian doctrine. During the past one hundred years the population of Great Britain has more than doubled itself, and this increase has not been accompanied by any lowering in the standard of living. In fact, quite the contrary. There has been a steady increase in the wealth per head of the population. Man's wants and desires have become more diverse and have increased to such an extent that the luxuries of one generation become normal requirements of the succeeding generation.

Finally, there is one very obvious objection to the Malthusian doctrine, namely, that there is no evidence to support the expression of the relationship between population and the means of subsistence by any so-called mathematical formula.

It now remains to ask what value is there in the teaching of Malthus? The contribution of Malthus to economic thought, in spite of the shortcomings of his doctrine, are not difficult to assess. Malthus drew the attention of all thinkers to the question of population and, in so doing, influenced thought on the subject by directing it along more rational lines.

One very interesting point is that this influence of Malthus went beyond the scope of economic theory, for his treatment of the very important problem as to the manner in which population and the means of subsistence were to be adjusted to each other, inspired Charles Darwin to formulate his conception of the struggle for existence and "Natural Selection" and so revolutionize the science of biology.

THE QUESTION

What is the modern theory of population?

THE ANSWER

The problem of unemployment during the years 1919–39 raised the question of population in another form. This resurrection of the problem followed a period of roughly a hundred years, during which the conditions characteristic of what the economic historians call the " Industrial Revolution ", with its improved techniques of production, the development of mechanical transport, and greatly improved communication, had apparently pushed the significance of the Malthusian doctrine into oblivion.

With the post-war depression, the problem of population was now stated in a new form. It was no longer a question of population in relation to the means of subsistence but of population in relation to the opportunities for employment and for an income. In order to avoid any confusion it will be convenient, at this stage, to state categorically that the problem of population and the problem of unemployment are not directly related. Having cleared the air on this point, it can now be said that the modern economic approach to the problem is along the lines that in dealing with the question of population we are concerned with the allocation of resources existing at any given point of time to the maximum advantage. This being so, any discussion of the " absolute " size of the population will be sterile. The ideal population of any society at any given point of time is called the " optimum ", which can be described as that population which, in relation to resources or means of production, will yield the greatest wealth per head of the population.

This new conception comprehends diminishing returns not in the rather restricted sense as stated by the classical economists but in a wider economic sense. In stating the law of diminishing returns as indicating the limiting factor to the productivity of natural resources, land was considered as a constant factor in a particular productive combination,

the variable factors being the units of labour and capital which were being applied to land. In relation to population, we are bound to recognize that, at any given point of time, productive resources are relatively fixed. If, then, population expands disproportionately to these relatively invariable resources, the returns, i.e. the wealth per head of the population, will tend to diminish. In other words, we shall have a state of over-population, a fact that will be recognized when an increased amount of wealth *per capita* accrues should the population afterwards tend to diminish relative to existing resources.

THE QUESTION

What is meant by the supply of labour and what factors influence it?

THE ANSWER

Hitherto we have been mainly concerned with the ultimate determinant of the supply of labour, namely, the size of the population, but it is necessary to emphasize the fact that the supply of labour does not necessarily depend only on the total size of the population. In order to explain this, it is better to conceive the supply of labour as consisting of a *flow of services* over a period of time. By doing this, we can more conveniently examine those factors which influence the volume of this flow.

In the first place, closely allied to the question of the size of the population is the *age-composition* of the population. Thus the most effective population from the productive point of view will be that, other conditions remaining the same, which contains the greatest number of persons of effective working-age—whatever this may happen to be.

Then again, there is the important question of the period for which the services of labour are available; in other words, the working day. It has been fashionable for over a quarter of a century to advocate uniform working days for

all grades and types of workers. This may be justified from the *sociological* point of view, but, from the *economic* standpoint alone, may be very difficult to justify. As the results of the researches of the industrial psychologists show, there exists for each type of work and for all occupations an optimum working day. Any departure from the optimum, in the form either of increased or decreased working hours, will have an important influence on the amount of effective labour available.

Finally, we must not overlook the fact that the *intensity* of the effort exerted by the worker may alter. It is now a historical fact that production generally in Great Britain following the evacuation from Dunkirk showed a tremendous increase. The incentive in this case was the realization of the impending danger of invasion. The realization of a national emergency is not necessarily the only form of incentive to production. Generally speaking, incentives are many and varied, and under their influence the supply of labour will be greatly affected.

Before leaving the question of the supply of labour, we must not overlook the productiveness of labour which, in the main, depends on two factors, namely:

(1) The efficiency of the individual labourer;
(2) The way in which labour is organized so as to harmonize with the productive process as a whole.

Under (1), the efficiency of the individual labourer will depend essentially upon general intelligence, the educational environment of the labourer: his working conditions and social background; whilst under (2) there is a question of vocational guidance in the period preceding entry into active working life. In the case of persons having left school and entered industry and commerce, the question becomes one of vocational selection, i.e. fitting the worker into that position for which his intellect and physique best fit him.

THE QUESTION

What is Capital and what is its function in modern society?

THE ANSWER

Capital means different things according to the context in which the term is used. For our own immediate purpose we can define capital as:

> "That portion of wealth which is used productively, i.e. for the production of further wealth."

In order to distinguish it from "Income", capital is best conceived as stock of goods existing at a given point of time, whereas income is generally considered as a flow of goods and services over a period of time.

To the popular mind, capital is usually regarded as consisting of money or funds in the hands of an individual, or a business unit by which command of the services of land and labour may be obtained. When this money or these funds are spent on these services for the purpose of production, such liquid capital is said to be "Invested".

Here a useful distinction can be drawn between what is known as (*a*) Fixed and (*b*) Circulating capital.

(*a*) **Fixed Capital** represents the more durable form of money investments and it exists in the form of economic goods acquired for use and not for the purpose of re-sale; whilst,

(*b*) **Circulating Capital** is the form which occurs when the money is invested in such a way that its function is completely performed by a single use in the productive process in which it is engaged. Thus, when money is invested in a stock of goods for re-sale, those goods represent circulating capital.

The distinction can be made clearer by the following example of a business engaged in the purchase and re-sale of furniture. When furniture is acquired for furnishing

the offices of the management and staff, then this investment represents fixed capital. As such it will perform its function in production more than once and its utility to the business cannot be exhausted by a single use. On the other hand, when money is invested in acquiring stocks of furniture for the purpose of re-sale at a profit, such stock represents circulating capital, and, as each item of furniture is sold, the value of the capital invested in its acquisition should be fully recovered. In this way, circulating capital performs the whole of its function in a single use.

Although stress has been laid on the more popular monetary conception of capital, we must not overlook the fact that all buildings, plant, machinery, tools, equipment, semi-furnished goods, that is to say, all the material equipment, used in production must be regarded as capital or producers' goods to distinguish them from consumers' goods, i.e. goods available for immediate consumption.

Turning now to the function of capital, in modern economic society, we can only get a clear idea of the real nature of capital by examining modern productive conditions. It has already been shown that a few centuries ago, productive processes were relatively simple as regards the extent of the organization involved. The average workman usually performed either the whole or a substantial number of the essential processes, whereas under modern conditions there is minute specialization involving a high degree of co-ordination and direction. The older conditions resulted in an almost immediate supply of commodities available for consumption, and it would be correct to regard this as "Direct Production". In the case of modern production, the most outstanding characteristic is the fact that in the stages that intervene between the inauguration of production and the act of final consumption or sale to the consumer, there is a tendency to increase the number of processes. This lengthens the overall period required for the preparatory

stages of production, but the final result is a greatly increased flow of goods to the consumer. The whole position has been summed up by Professor Taussig in the following words:

> "Labour is first applied to making tools, collecting materials, perfecting means of communication, and finally at the close of the preparatory steps which may be long and arduous, the enjoyable product emerges, and emerges in much greater abundance than if labour had been applied directly. The mine, the railway, the steamship, the iron works, the factory, the warehouse, the wholesale and retail store, all stand for a prolonged and time-requiring process of production."

The point of all this is that indirect production involves, for the time being, a postponement of consumption. This "waiting" or "abstinence" is greatly stimulated by the knowledge that output is enormously increased by the use of "indirect" or "roundabout" methods of production. Now under this system, until the goods appear as final products for consumption, they can be regarded as reserve goods. It is the capacity to hold large stocks of these reserve goods over a period of time that constitutes the real function of capital.

It is worth noting that given this roundabout process of production, in any form of society the function of holding these stocks of reserve goods and to do the "waiting" during the interval before the goods are consumed must still be performed. Under the present system, the function is performed by the capitalist.

THE QUESTION

What is implied by the term Capital Consumption?

THE ANSWER

Capital goods depreciate and become obsolete, and this "wastage" must be made good if society as a whole is to remain even stationary, but if society is to progress the amount of capital must be increased.

When a society devotes its resources to increasing the output of consumers' goods by employing more of these resources, including existing capital (so long as it lasted), on the direct production of consumers' goods instead of maintaining or increasing its capital, the result is known as capital consumption.

Thus, during the period of a war, most countries, with the abnormal demands made upon their resources, have to *consume* their capital by reason of the fact that *all* available resources have now to be directed to the production of the requirements of war and to the maintenance of a reasonable standard of living. This precludes the possibility of resources being allocated to the function of keeping productive power intact.

THE QUESTION

What are the conditions under which Capital is accumulated?

THE ANSWER

The growth and accumulation of capital depend on the amount of saving, i.e. the difference between production and consumption. The question naturally arises as to the precise meaning to be attached to the term " Saving ". To do this, a distinction must be drawn between (*a*) Spending; (*b*) Hoarding; and (*c*) Saving. Spending is the use of resources in order to satisfy present needs, such resources being capable of being otherwise used for the purpose of production. In the case of hoarding, commodities which are available for consumption are not used at all, and hoarding cannot be regarded as any form of consumption. Saving implies a definite aim, namely, the provision of resources for the purpose of production, and is, therefore, the devotion of the factors of production to the satisfaction of future needs.

The amount of saving depends on four main conditions, namely:

(1) By the ability to save; in other words, by the possession of a surplus income.

(2) By the relative importance which is attached to present and future pleasures.

(3) By the expectation that the wealth that is saved will appreciate or depreciate in value in the future.

(4) By the extent to which reliance can be placed on the fact that the wealth saved will be actually enjoyed in the future.

In connection with these conditions, the following observations are apposite. Saving is not practised by persons who value present pleasures and satisfactions at a high rate and refuse to discount them in terms of the future. Further, on the whole, the prospect of an appreciation in the value of the amount of the money saved in terms of purchasing power will tend to stimulate the amount of saving forthcoming. The rate of interest also has an effect on the rate of saving. Other things being equal, the higher the rate of interest the greater will be the stimulus to saving, while a low rate of interest will not tend to induce a great volume of saving except in the case of those persons who would tend to save under any conditions. There is, however, the case of those persons who save for a fixed return or income in the future. In such cases, changes in the rate of interest may have a negative effect on the amount of saving which can be explained in this way. If the general level of interest rises there will be no need to save so much in order to obtain the return or income, and a greater amount of wealth can, therefore, be devoted to present satisfactions. The converse position is also true.

The enormous increase in the amount of capital accumulated during the nineteenth as well as during the present century has been greatly encouraged by the economic and

political security which has been enjoyed. In any society in which life is of a lawless and unstable character there will be no incentive to capital accumulation by reason of the fact that there is no certainty that the savings will be enjoyed in the future.

THE QUESTION

Examine critically what is meant by the Entrepreneurial Function in modern economic society, and discuss the form it takes.

THE ANSWER

In examining the functions of the agents of production: land, labour and capital, it becomes evident that the contributions made by each of these factors must be unified by some directing intelligence in order that the combined efficiency may be at a maximum.

The provision of this directing intelligence is the function of the " entrepreneur " or " organizer ". Neither of these terms is a very good one. The term " entrepreneur " was frequently used by the classical economists, and although modern economists use the word " organizer ", the function covered by the term is the same, namely, to bring the other agents together and arrange their working in such a way that the greatest economic efficiency in the sense of the maximum possible return is the result.

We must guard against the error of conceiving the function, which we have described as " organization ", as a wholly conscious process. So far as capitalist societies are concerned, nothing is farther from the truth, for, in them, organization arises almost unconsciously from the fact that owners of the forces represented by land, labour and capital tend quite naturally to place these services in those occupations in which they are likely to receive the greatest reward. It is a fact that such occupations generally coincide with

the conditions under which the forces will be put to their most effective use. In this way, the agents of production have a tendency to gravitate to a combination of conditions in which they can perform their function in production most effectively.

Where, however, the work of organization is consciously performed, the entrepreneur or organizer undertakes the following responsibilities. In the first place, he performs the bulk of deliberate organization within society and, in doing so, he combines a complex series of widely diverse economic activities into a definite system, which ensures that each member of that society receives those goods and services of the kind and in the quantity he demands. Secondly, the entrepreneur shoulders the risks of production. These risks arise from the dynamic nature of economic society with its attendant characteristic of constant change. It is this fact which partly explains the nature of economic reward to the entrepreneur in the form of profits.

Further, in modern society, the entrepreneurial function is rarely performed in the abstract, but is more frequently combined with some other function such as providing land, labour and capital, and it is for this reason that we find the term entrepreneur used to denote the person or group of persons controlling the policy of a business unit. It is difficult for any person without material assets to borrow capital, and it is, therefore, mainly the owners of capital who undertake the entrepreneurial function.

Entrepreneurial function takes three main forms to-day, and these are:

1. SOLE TRADER. During one phase in economic history this was the dominant form, and even to-day it is still of numerical importance. For example, the form is still very important both in agriculture and in the retail trade. It has the drawback of limiting the size of the business unit owing to the inadequacy of capital, and the fact that the

owner is not usually qualified to exercise equal ability in all the departments of the undertaking.

2. PARTNERSHIP. This is the most usual manner in which the sole trader's business can be extended, and it consists of an association of persons who carry on some business for the purpose of making a profit. It is very important in most of the professions, but it suffers from the drawback that the liability of the partners is not limited. This fact, together with that of inadequate capital, tends to place a restriction on the growth of the unit.

3. JOINT STOCK COMPANIES. These are probably the most important form of business unit in modern industrial society. The popularity of this unit is based on the co-existence of two important principles, namely:

(*a*) *Joint Stock*—which enables large amounts of capital to be gathered together in one fund from a large number of diverse and, individually, relatively small sources;

(*b*) *Limited Liability*. Whilst the principles of joint stock are very old, it was not until the nineteenth century, i.e. during the period when industry was expanding rapidly, that the limited liability device was applied to joint stock concerns. In effect this principle restricts the liability of each investor to the amount of his investment. Thus, when the investor has placed his amount of liquid capital at the disposal of the company, in the event of the latter having to be wound-up, he cannot be called upon to contribute any additional amounts to meet the liabilities of the concern.

THE QUESTION

Discuss the position of joint stock companies in modern economic society.

THE ANSWER

Joint stock organization has proved to be a very powerful and, at the same time, efficient instrument of production. The reasons for this fact are many, but chief among them is the fact that large amounts of capital can be obtained and so enable the agents of production to be effectively combined. At the same time, the directors can bring expert minds to the problems confronting the concern. This form of business organization is not, however, without its defects. Experience shows that the individual shareholders or investors who legally have the ultimate control of the concern, have, in fact, very little influence on policy for a variety of reasons. There is also the important social fact that the form lends itself to inefficient and even to dishonest management, with the result that the resources of society tend to be dissipated.

There is a further fact contributing to the popularity of the Joint Stock Company, namely, that, within the limits imposed by the tendency to diminishing returns, this form of business unit is capable of almost indefinite expansion and the realization of the economies of large-scale production. These economies are usually distinguished under the following headings :

(*a*) Capital can be economized by using large production units which can be kept running continuously and thus the saving of labour will more than compensate for the high initial cost.

(*b*) Labour can be economized as a large production unit is able to afford the services of specialists. In any case, there is generally sufficient scope for jobs to be given to men for which their efficiency best fits them.

(*c*) In the purchase of raw materials, these can be acquired relatively cheaply as the quantities required will permit of bulk-purchasing with its lower prices and larger discounts.

(*d*) In the process of production, raw materials can be effectively economized by the utilization of by-products. Specialist research workers can be employed to discover the best and most remunerative uses to which waste-products at each stage of the process can be put. The producing unit can even be extended so as to embrace plant for the special purpose of utilizing by-products.

(*e*) Finally, motive power can be economized as given units of power can be employed to drive a larger quantity of plant and machinery.

There are, however, several disadvantages which must be weighed against the advantages already considered.

They are:

(*a*) Difficulties of control. With each expansion in the size of the business an increasing number of devices have to be employed in order to control the business. Such devices, while necessary, do not necessarily make an effective contribution to production.

(*b*) There is the important drawback that, by its nature, the large-scale unit is impersonal in its relationships both with its customers and with its employees. In the latter case, this may have the serious consequence of being a contributory factor in the promotion of industrial unrest.

THE QUESTION

Discuss, giving reasons, the forms taken by Industrial Combinations.

THE ANSWER

The economies of large-scale production led to lower costs, which under the stimulus of competition were reflected in lower selling prices. These forces reacting upon each other led to a struggle between businesses, the nature of which

was so keen that, in the attempt to capture as large a part of the market as was possible, cut-throat competition ensued, with prices ruling so low as to yield a very small return on the outlay of resources. This state of affairs could not persist for long and various measures were taken to eliminate it. Generally speaking, these measures have taken the form of associations and combinations.

It is not always possible to perceive easily the stimuli behind the different forms of combination and association. Broadly speaking, two main types of combination may be distinguished, namely, (1) Temporary, and (2) Permanent. Before discussing these in any detail it is worth while noting that the legal system of a country frequently determines the exact form taken by the combination. Thus, in Great Britain the legal doctrine of restraint of trade has prevented the development of the more temporary forms of combination. The same is true of the U.S.A., where the Sherman Anti-trust Act has had the same restrictive effect. In the case of most continental countries, where the doctrine does not operate, it has been possible legally to enforce adherence to restrictive covenants previously entered into, even though they be in restraint of trade, and for this reason the more temporary forms of association, such as Kartels, prevail.

The types of combinations can be classified as follows:

1. *Agreements.* This term covers those temporary alliances which come into existence with the main object of influencing market conditions by controlling supply and thus raise and maintain prices. Thus we find "Price Agreements", "Pools", "Rings", etc. Sometimes these agreements between competing firms take the form of the division of territory in such a way that the parties to the agreement are restricted in their sales to a particular territory. For reasons too numerous to mention here, associations based on agreements between competitors are fre-

quently unstable and are terminated after a relatively short life.

2. *Kartels*—a form of voluntary monopoly consisting of a combination or association of several firms in the same business formed with the object of adopting a common policy in relation to the output of products or of the prices at which these products are to be sold. Generally speaking, the members of the Kartel retain their separate identity, and where the agreement relates to output, each constituent has a quota of output which should not be exceeded. Should this happen, then a sum of money for each unit of output by which the quota is exceeded is paid into a fund from which are indemnified those members not attaining their quota. It will be realized that this form of organization leaves the members free to make their own marketing arrangement, but often this is taken out of the hands of the individual firms by means of a marketing organization known as a " Selling Syndicate ". The operation of this arrangement is that each firm sells its output to the Selling Syndicate at an accounting price. The syndicate now places the products on the market to the maximum advantage, the profits realized being distributed between the members in proportion to the quota made over to the syndicate. As already mentioned, the legal position in England and the U.S.A. tends to discourage the Kartel form in both these countries, where its place has been taken by what is known as the " Trust ".

3. *The Trust.* The so-called trust takes various forms, but the object is the same, namely, the bringing together of a number of powerful competitive business units under a single control. In this process the units lose practically all independence of control—although in many cases they preserve their separate identity. In the case of the true " Trust ", management is completely vested in " Trustees ",

to the owners of such businesses trust certificates. Each holder of such a certificate then receives a proportion of the total earnings of the trust, the exact proportion being determined by the estimated value of the original business.

4. *Holding Companies and Amalgamations or Mergers.* Both these forms of combination have developed in England in recent years and are relatively permanent in their effect on business organization. The holding company is an incorporated concern and is, therefore, a distinct legal entity. The businesses constituting this form of combination agree to exchange their shares at an agreed rate for holdings of shares in the holding company the director of which now exercises the fullest powers of direction and control and administers the combination as a complete whole, even to the extent of closing down the less efficient producing units. The Amalgamation or Merger, as the name implies, is the complete coalescence of a number of hitherto competing units into one concern, e.g. the Imperial Chemical Industries.

In modern business there appears to be a continual movement, as it were from more or less formal "understandings" and agreements to the more highly organized and unified amalgamation or merger.

THE QUESTION

What is meant by (a) Vertical Integration and (b) Horizontal Integration of Industry?

THE ANSWER

In the process of the combination of hitherto competing business units, it frequently happens that there is a tendency to gather up into a unified control a number of functions which are specialized and have hitherto existed and have been performed separately. This integration of process often takes the form of linking up all the stages of production from the extraction of the raw material to the marketing of

the finished product. This is known as vertical integration. There is a stimulus to this form of integration in that the various stages form a market for one another's products and there is, therefore, the economy that each stage in the process of manufacture is able to obtain its raw materials at cost or just above cost price. Typical examples of this form of integration are to be found in the case of Dorman Long, Ltd., an engineering firm, and Lever Bros., Ltd., manufacturers of soap.

Distinct from this process of vertical integration is the form of integration and combination known as horizontal integration or combination, which consists of the amalgamation of business units engaged in the same stage of production. Two typical examples of this type of combination are to be found in the case of the Imperial Tobacco Company and the Bradford Dyers' Association. With horizontal combination, the stimulus is the elimination of excessive and unprofitable competition, or even the control of a particular stage in production, and so exert a monopolistic influence on prices.

THE QUESTION

What causes determine the optimum size of a firm in modern industry?

THE ANSWER

In any industry there is to be found a particular size to which businesses in that industry tend to grow. The optimum firm can be defined as:

> "That firm which in existing conditions of technique and organization ability has the lowest average cost of production per unit, when all those costs which must be covered in the long run are included."

In considering the forces which tend to the establishment of the optimum firm, we must recognize that in part it will

be the result of the deliberate actions on the part of persons having control of resources seeking to invest those resources in the most profitable manner. It will also be partly due to the forces of competition which tend to eliminate those units which owing to inefficiency in one or more of its aspects cannot survive.

The causes which go to determine the optimum size, according to Mr. E. A. G. Robinson in his book *The Structure of Competitive Industry*, can be considered under five headings. In the first place, there are "technical forces", making for a technical optimum size; managerial forces, making for an optimum managerial unit; financial forces, making for an optimum financial unit; the influences of marketing, making for an optimum sales unit; and the forces of risk and fluctuation, making for a unit possessing the greatest power of survival in the face of industrial vicissitudes. These influences will tend to interact upon one another and so produce the optimum unit.

It follows, from what has been said, that the size of a business unit is determined by definite principles and is not the result of any single arbitrary influence. Further, it must be realized that the optimum unit is a relative concept and not an absolute one. The size of a business unit is only at an optimum relative to given conditions which, owing to dynamic conditions, are subject to change. This tendency for a business unit to develop to the optimum size explains why within an industry we find units of different sizes and in different stages of efficiency. Finally, it is this striving to attain the optimum size unit in any industry which leads to vertical integration in some cases. In other cases, the influences of marketing, making for an optimum sales unit, have led to the development of the departmental store, while in different circumstances the chain-store organization gives the most effective results from the economic point of view.

Chapter 4

THE PROBLEM OF DISTRIBUTION

THE QUESTION

What is understood by the Problem of Distribution?

THE ANSWER

We have already seen that the agents of production acting in combination are responsible for the aggregate of goods and services available ultimately for consumption and which constitute the social income. This income of society, which is coterminous with what is known as the " National Income ", has been defined by Bowley and Stamp as:

> "The sum total of wages, salaries, profits, interest, rents of lands and buildings, including the case of owner-occupiers, received within the year or any other arbitrary period of time."

From this definition it will be realized that only definite monetary payments for goods produced and services rendered within the year are recognized by this definition.

At this point, it is necessary to mention that this conception of the Social (or National) Income must be considered in relation to National Wealth, which statisticians define as:

> "The sum total of possessions held by the inhabitants of a country, singly and collectively, which can be exchanged or transferred."

In connection with the definition it has been pointed out elsewhere (see *Textbook of Economics*, Briggs and Jordan) that what are known as free goods are excluded from this definition, as also are special human abilities—the skill and

training of particular classes. The obvious reason for this exclusion is that neither free goods nor these special abilities are capable of being transferred.

Turning now to the question of the Social (or National) Income, the problem of distribution in economics is concerned with the principles underlying the manner in which the division of the income is apportioned between the agents of production in the form of the rent of land, the wages of labour, the interest on capital, and the profits of the entrepreneur or organizer.

The conventional method of treatment of this subject is to consider it after first dealing with the economic problems of production. This gives rise to the idea that in actual economic life distribution follows the process of production. A little reflection will show that, in fact, production and distribution occur concurrently as labour is remunerated at regular short intervals, while the entrepreneur is probably having to remunerate land and capital concurrently with the employment of their services.

When we talk of wages, rent, or interest we usually have in mind the individuals actually in receipt of these forms of income, but in economics we conceive two aspects of the problem, namely, (*a*) the functional aspect, which explains the principles underlying the determination of the amount going to labour, land or capital as a whole, and (*b*) the personal aspect, which is concerned with the distribution of this income between persons.

For the most part, we are concerned in economics with the study of the functional aspect of distribution, although the personal aspect is never overlooked. The reason for this is merely that of convenience, as the various factors which go to determine the amounts of personal incomes are so complicated that it is doubtful whether any useful purpose could be accomplished by concentrating attention upon them. There is no real disadvantage in this functional

approach as, in the last analysis, the sum total of the personal incomes are the various functional incomes.

Finally, it must be pointed out that in the absence of a planned society, the distribution of the social income does not conform to a planned or organized system. Rather does it occur naturally as the result of the influence of individual self-interest unified and regulated by price, as, broadly speaking, the money income each person receives will be determined by the supply of and the demand for the services of the factor or factors of production over which he exercises control.

THE QUESTION

What is meant by Economic Rent? Is there such a thing?

THE ANSWER

The modern treatment of the rent of land has been greatly influenced by the teaching of the classical economist Ricardo. When speaking of the rent of land we are referring to the payment for the services of natural resources, and this distinguishes it from the popular conception of rent. In the words of Ricardo:

> "Rent is that portion of the produce of the earth which is paid to the landlord for the use of the original and indestructible powers of the soil. It is often, however, confounded with the interest and profit of capital, and, in popular language, the term is applied to whatever is annually paid by a farmer to his landlord."

The Ricardian theory of rent is based on the assumption that rent emerges as a result of the superior fertility or productive ability of some lands over other lands, particularly those lands which it barely pays to cultivate, i.e. those lands on the *margin of cultivation*, but which have to be put under cultivation in order to raise the amount of produce

required of which the current effective demand is an index.

The theory can be further explained in this way. Let us assume that we have two pieces of farming land called *A* and *B*. In the case of *A*, after the application of a certain amount of labour and capital, the return is 30 units of produce, an amount that makes it only just worth while to cultivate the land at the prevailing price being obtained for the produce. This can be regarded as the marginal piece of land. In the case of *B*, with the application of the same amount of labour and capital as in the case of *A*, the return is 100 units. Now the essence of the Ricardian theory is that rent will emerge by reason of the fact that it will quite clearly pay the tenant of *A* to take over the cultivation of *B* and pay its owner the equivalent of 65 units of produce by way of rent. In fact, he would be no worse off if he paid even 70 units.

Thus, at any point of time, according to the Ricardian theory, rent is explained by reference to the margin of cultivation. One feature of the theory has given rise to considerable controversy, namely, the insistence on the part of Ricardo of the fact that the payment of rent did not enter as an item of cost of production. This was explained by pointing out that the producer at the margin of cultivation obtained a return which was only sufficient to cover his expenses of production. It is explained that this line of argument was adopted by Ricardo by reason of his acceptance of the Labour or Cost of Production theory of value, which stated that the labour embodied in the production of any commodity was the sole determinant of its value. Capital was to be regarded as labour in a "crystallized" form, and a logical acceptance of the labour theory of value could only be justified by asserting that rent did not form part of the cost of production. Thus rent was price-determined and not price-determining.

Turning next to the modern development of the theory of rent, it became evident to the economists who followed Ricardo that the peculiar feature of land, and indeed of all natural resources which are the gifts of nature, is that the supply does not respond to any efforts exerted by man. In other words, the supply of natural resources is not perfectly elastic, and the question naturally arose, " Could the same reasoning be applied with validity to the supply of any factor of production which, at least for the time being, has a less than perfectly elastic supply ? " The fact was generally admitted and the statement emerged that " the rent of land is but a species of a genus ".

We can now define rent according to the modern conception in the following terms :

> "Whenever a factor of production is receiving a greater income than the minimum amount necessary to induce that factor to remain in its present occupation, the surplus of receipts over its minimum supply price may be called economic rent."

In this sense, as already implied, rent can only arise when the supply of any factor of production is not perfectly elastic and because the demand for the particular factor is such that it is necessary to use more units of it than would be offered at the lowest supply price of any unit. An example will help to make the position clearer. Let us assume that in a particular district there is a demand for oxy-acetylene welders, and let us assume that (in normal times) a wage of £5 per week is offered and that 1,000 workmen will come forward to work at this wage or price of labour. If this response is insufficient to meet the demand, and the wage offered is now raised to £5 5*s*. per week, and the effect is that a further 100 workmen now come forward, and so on with every increase of 5*s*. in the rate, we can show the position in the following table as follows :

Wage offered	£5	£5 5s.	£5 10s.	£5 15s.	£6
Number of men willing to work	1,000	1,100	1,200	1,300	1,400

It follows from this that the higher the wage offered in order to obtain the necessary number of workmen, the higher the economic rent received by those who would be willing to work at a lower wage than that offered.

This can be further illustrated graphically by means of the following diagram :

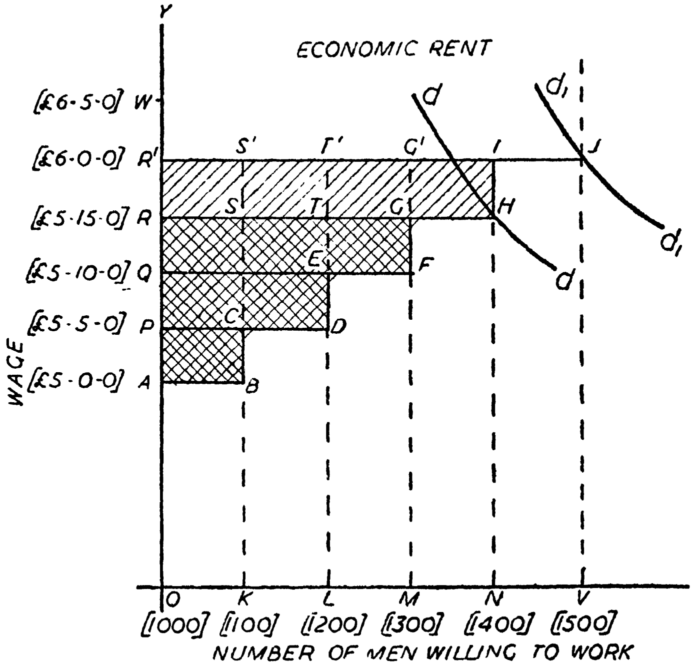

Fig. 5.

[This diagram is based upon Fig. 37 of *Economic Analysis* by K. E. Boulding.]

The wage offered is measured along the axis *OY*, while the number of men willing to offer their labour at each of the wages is shown along axis *OX*. The broken line *ABCDEFGHIJ* is the supply curve. This curve is discontinuous for the sake of exposition. The series of "steps" can be made as small as we wish, for our conclusions hold good for a supply curve which is continuous. From the diagram, it is evident that if 1,400 workers are required and the wage offered is £6, then all those who would have been willing to work at a lower wage will receive an economic rent. In the case of those workmen who would have offered their services at a weekly wage of £5, and who now receive a wage of £6 per week, they get an economic rent represented by the rectangle *ABS′R′* and so on with other workers.

THE QUESTION

Explain the effect on the economic rent of land of (a) a rise in demand, (b) of agricultural products.

THE ANSWER

(*a*) If there were a rise in the demand for agricultural products, the effect on the economic rent of land would be to cause it to rise. If we refer to the diagram (Fig. 5) and substitute along the *OY* axis the prices of agricultural products and along the *OX* axis the amounts forthcoming at these prices, and if now, the demand rises as shown by the shifting of the demand curve to the right, *dd* to d_1d_1 passing through point *J*, the economic rent received by those farmers who would have been willing to place their products on the market when the prices were *OA* will now be increased from *AR* to *AR′*, and so on. The economic rent received by the farmers who would be willing to offer their products at prices *OR* will now receive an increased economic rent, and even at *N*, economic rent will be received for the first time, namely, that rent represented by *HI*.

(*b*) The effects of improved methods of transport on the economic rent of land can be explained as follows: At prices ruling, the highest rent will be received by that land nearest the market, provided all the land is of equal fertility, because the costs of transporting the products of land at some distance from the market will give smaller returns to the farmers working that land. The site advantage of that land near to the market, therefore, gives it a differential advantage resulting in rent. With improved (and by implication) cheaper transport methods the result will be a reduction in this differential advantage, with a consequent reduction in rent. It is worth noting in conclusion that the improved methods of transport will enable the products of land formerly below the margin of cultivation to be brought to the market, and this increased supply relative to the demand will have the effect of reducing prices and consequently rent.

THE QUESTION

What theories have at any time been put forward to explain wages? Discuss these theories.

THE ANSWER

It should be quite clear that in dealing with the theories relating to wages we are concerned only with those dealing with the functional aspect of the question.

Theories dealing with the wages of labour have always given rise to considerable interest (and to controversy) because of the human element involved, a fact which makes it easy to confuse what actually is with what should be. Avoidance of confusion can be achieved by keeping in the forefront of any discussion the fact that labour is one of the means of production, and the remuneration going to it as a whole is capable of explanation by the marginal analysis (as is the case with the remuneration of all the agents of

production). In the case of labour, wages are explained in modern economics by the marginal productivity theory.

Historically, there have been several theories which by reason of their influence on modern thought must be understood even to-day. These theories are known as (*a*) the Subsistence Theory, (*b*) the Wage Fund Theory, (*c*) the Residual Claimant Theory.

(*a*) THE SUBSISTENCE THEORY. This theory, which is also known as the " Iron Law of Wages ", is based on the assumption that labour power is a commodity capable of being bought and sold between employer and workman at a price (the wage) which in the long run conforms to its cost of production. This cost of production of the labour of the labourer was stated to be the subsistence level, i.e. the amount of wage (interpreted in terms of goods and services) which was just sufficient to maintain the worker and his family. It was further declared that wage would approximate to this level and to no other. Thus it was argued that if higher wages than the subsistence level were paid, there would be a tendency for the workers to have larger families and thus ultimately the number of labourers would increase and the intensified competition for employment would have the effect of forcing down the level of wages. On the other hand, if wages lower than the subsistence level were paid, the workers would be existing in a state of semi-starvation. The greater liability to disease and the lowered efficiency of labour would cause wages to be raised to the subsistence level.

Experience does not altogether support the theory, although it must be admitted, in fairness, that it reflected to a faithful extent the conditions of the working class at the time it was first put forward, namely, the second half of the eighteenth century. Even to-day, it is believed by some writers to be indicative of the conditions existing in such countries as India, China and Egypt.

(*b*) THE WAGE FUND THEORY. This theory is generally regarded as an advance on the Subsistence Theory, for the reason that it took into some account the influence of demand. The theory owes its development to John Stuart Mill, although it had been held in some other form by most of the classical economists. Mill argued that wages depended on the " proportion between population and capital ", and explained that the labourer receives his wages before the products of his labour are sold and that the entrepreneur not only provides the plant and machinery (i.e. the fixed capital) used in production, but also pays out of the capital at his command the wages of the labourers, so that their wants may be satisfied during the process of production. Thus, the Wage Fund emerged as the fixed proportion of the capital of the country devoted to the payment of wages : it could also be assumed to be, under these conditions, and in monetary terms, the total demand for labour.

Further, the wages ruling at any particular point of time were determined by the ratio between the amount of this wage fund and the total supply of labour in the form of all those workers who offered their labour in order to obtain a living. It must be observed that this theory involved no real inconsistency with the subsistence theory already discussed, for, as wages depended on the relationship between the working population and the wage fund applied to its remuneration, there was little more than was available for the payment of wages at subsistent rates. Again, if the wage fund remained stable while the number of the working population increased, then the rates of wages must fall.

The conclusion was also drawn that the wages of individual workers and groups of workers in one trade or occupation could only be increased at the expense of wages in other trades or occupations. The only hope held out to the workers as a whole was that wages could rise only if capital increased at a faster rate than the population (this implies

an increase in the amount of savings) and if the total working population decreased relative to capital. There was another interesting argument which must not be overlooked, namely, that if by some form of concerted action the workers succeeded in obtaining a general rise in wages, this would be only at the expense of profits, which eventually would cause less capital to flow into industry, and the demand for labour relative to the supply would diminish and wages would ultimately fall.

Many criticisms have been levelled at the Wage Fund Theory of wages. It has been stated that it is merely a statement of a self-evident truth, namely, that the general level of wages is determined by the total sum paid to the workers divided by the number of workers. Again, it is stated with truth that the ultimate source of wages is the flow of goods and services forming the social income, and not a fund which represents in effect a fixed proportion of total wealth.

(*c*) THE RESIDUAL CLAIMANT THEORY OF WAGES. It will have been noted in considering the foregoing wage theories that little hope is held out to labour of an increased reward for its services, and consequently a rise in economic status. The idea gradually developed that there was a distinction between wages of a workman and the labour cost to the entrepreneur employing him. Thus if *A* and *B* working at the same type of work produce respectively 120 units and 80 units, it would pay the employer to remunerate *A* at the rate of £5 10*s*. per week as against the £4 per week of *B*, because the *cost of labour per unit of output in the case of A is lower than in the case of B*. Thus the better-paid worker would be paid more because he is worth more. In other words, *A* has a greater productivity. The conclusion was drawn that wages are ultimately dependent upon the productivity of the labourer and vary with it. It is this conception which forms the basis of the Residual Claimant

Theory. It is so-called because its exponents considered the worker as the residual claimant to the product of industry. Thus:

> "The wages of a working man are ultimately coincident with what he produces, after the deduction of rent, taxes, and interest on capital."

It followed, therefore, that the greater the efficiency of the worker, the greater the share of the product to which labour could lay claim. It will be seen that this theory offers a considerable advance over previous theories in that it showed how labour could benefit from its contribution to production. If, therefore, the general efficiency of labour were increased, either as a result of an improvement in the efficiency of the individual labourer or as a result of the better organization of his efforts, then the result must be a benefit to the workers as a whole.

Nevertheless, the drawback to the theory is that it does not offer a complete explanation of the reasons for the changes in rates of wages at one point of time as compared with another and, generally, it is difficult to apply precisely the arguments of which it consists to actual everyday conditions.

THE QUESTION

How is the Marginal Analysis applied to the question of wages?

THE ANSWER

The application of the marginal analysis to the problem of wages has been effected in the following way. While it is doubtful whether there is a direct relationship between wages and the size of the population, changes in population must be considered as the long-run determinants of the supply of labour. These changes take place so slowly relative to the other changes characteristic of dynamic society, that we must take the number of workers available

at any given time for granted. It follows, therefore, that we can define the supply of labour in the following terms, namely :

> "The schedule of the units of labour that workers are willing to offer at each possible price or wage-rate."

This definition leads to the conclusion that this supply will depend on the number of workers able and willing to work at each wage-rate and the working period (i.e. the hours) which each worker is willing to undertake to work at each wage-rate.

Now, we have already implied that the supply of labour during the short period is inelastic, and if this is so, then the demand for labour will be more effective in determining wage-rates than will the supply of labour. The demand for labour must be considered as a derived demand, in the sense that employers regard labour as measured not by the efforts exerted by individual labourers but by the contribution each worker is able to make to output and, therefore, to his revenue. In turn, it follows, then, that demand for labour is derived from the demand for the products of the employer.

This being so, there is clearly a limit to the number of workers the employer can profitably engage in this sense. In his organization of the producing unit, the employer will have to consider a changing labour force in relation to a constant quantity of the other factors such as land, buildings and capital (in the form of plant and equipment). The Law of Diminishing Returns indicates the fact that as increasing amounts of labour are combined with fixed amounts of the other factors, the marginal productivity after a certain point has been reached will tend to diminish. This optimum point will coincide with the marginal productivity of the number of workers employed at that point and the wages paid will tend in turn to coincide with the

marginal productivity of labour. If the marginal net product is greater than the wages he is paying there will be an incentive to employ more workpeople of the same efficiency in order to increase still further his return. If, on the other hand, the marginal net product is less than the wage paid, as part of his production is being carried out at a loss, the employer will discharge part of his labour force and will continue to do so until the marginal net product of his labour rises to the wages he is paying.

Up to now, we have considered labour from the point of view of demand, but the supply side cannot be completely ignored. Generally speaking, the workers have a conception of those goods and services which they require in order to satisfy a minimum standard of comfort, and, in the long run, they will not allow wages to be reduced below the level which is necessary to maintain this standard. The action they may take will depend on circumstances, but, it may be observed, that if relatively low wages are being paid in a particular industry, there will be a movement of workers out of that industry (or at least new entrants will not be attracted into it) until wage-rates are highered. In this connection, one of the most potent methods adopted by workers is to combine into Trade Unions for the purpose of the maintenance of their standard of comfort.

THE QUESTION

"Inequalities in wages are due to inherent differences in the population and can only be cured by eugenic reform." How far does this statement suggest the true explanation of the differences in wages?

THE ANSWER

The statement implies that if every worker possessed exactly the same mental and physical characteristics, and that if all occupations were equally easy to enter, these occupations being equal in their attraction, then in the

absence of any obstacles to the mobility of labour, the wages of all workers will tend to be equal.

It will be immediately realized that the conditions contained in this implication are not those of actual life. In fact, in the case of some occupations, workers of the type required are so scarce relative to the demand that the marginal productivity of those workers in the industry is great enough to command a wage relatively high when compared with that obtaining in other occupations.

This relative scarcity is due to many reasons which can be discussed as follows:

(1) Earnings in the professions, medicine, law, accountancy, etc., tend to be high because of the long educational training required with the consequent postponement of earnings. Relatively few persons are able to satisfy this initial pecuniary qualification for entry into these occupations, and this is the reason for the comparatively small supply of qualified persons.

(2) It must not be overlooked that individuals vary in their mental and physical abilities and certain occupations require skills and capacities not easily found.

(3) Certain occupations occupy different places in social esteem, and the social prejudice in favour of these occupations brings a supply of labour to these occupations which otherwise would not in all probability be forthcoming at the wage-rate.

(4) In spite of high wage-rates, some occupations fail to attract workers by reason of the high industrial hazards involved. These risks may be derived from the nature of the industry and may be such as to give rise to industrial disease.

(5) Another important influence on wages is the degree of social risk involved, i.e. the risk derived from insecurity of employment. The less the security, other things being equal, the higher the wages that will have to be offered

to attract workers as compared with other occupations in which more secure employment is offered.

(6) Partly arising from the preceding point, it must not be overlooked that human nature being what it is, there is a certain attraction to those occupations in which there is the possibility of very high earnings to the successful few. The existence of this possibility will tend to attract a greater number of people to this particular kind of occupation than would be induced into it if the reward were only the average rate of remuneration.

Turning once more to the question. An inherent difficulty and one which would have to be decided before all others, is the establishment of the standard, i.e. the kind of mental and physical abilities to which eugenic reform is to be directed. In other words, " It is no good talking of breeding a human type until we are quite sure that we are all agreed upon the type of human being we want to breed." Agreement of this kind would be difficult, if not impossible, to obtain. But even assuming this agreement is obtained, there is no guarantee that there would be no differences in wages. There would still remain those obstacles to a perfect mobility of labour already mentioned, namely, expense of training, social prejudice, industrial risks, lack of security. It is not, therefore, true to conclude that inequalities of wages are entirely due to inherent differences in the population, and that eugenic reform would be a remedy.

THE QUESTION

What are the chief influences that determine the rate of remuneration of woman's work in England?

THE ANSWER

In normal circumstances, the average woman worker earns considerably less than the average man worker.

Two main reasons can be advanced for this. In the

first place, it cannot be denied that in many fields of employment the marginal productivity of the average woman worker tends, on the whole, to be less than that of men workers. This in itself gives sufficient explanation for the fact that in the main women workers are concentrated into a relatively small number of badly paid occupations.

The reasons for the relatively low marginal productivity of women are many and include the lack of physical strength, the restricted opportunities in the case of women for some forms of technical training; but even in the cases of occupations in which the marginal productivity of women need not necessarily be lower than that of men workers, we find the following influences at work.

(1) Many employers are prejudiced (not always rationally) in favour of men as against women in the belief that the former with their greater social and domestic responsibilities are more reliable than women. Thus, it is argued that they are less liable to absenteeism on the grounds of sickness; they seldom refuse to work overtime on the grounds of previous social commitments. There is, finally, the argument that women regard their employment as of a temporary nature to be terminated on marriage. It might be urged that these arguments are capricious and without any valid foundation, but it cannot be denied that they have a real existence and have a definite effect on the demand for the services of women.

(2) Many trades and occupations are closed to women. This bar to entry into an occupation may arise from legal enactments, e.g. the prohibition to women working underground in coal mines arises from an Act of Parliament. The iron and steel trades are traditionally barred to women in normal times, and it is also worth mentioning that the diplomatic and consular services have been barred to women so far as Great Britain is concerned, although the recent experience of the United States and Russia has shown

that the ability of women in these spheres is at least equal to that of men.

(3) In many of the professions there is a prejudice against women. This prejudice exists against women as doctors, lawyers and dentists. It has no rational basis on the ground of differences of ability and is not confined to either sex.

To summarize, the smaller opportunities presented to women confine their employment to a small number of occupations in which the supply of their services relative to the demand for these services is great, with the result that the earnings of women in these few occupations are small.

THE QUESTION

Generally speaking, buyers of labour prefer to pay piece-rates and sellers of labour prefer time-rates. Why should this be so?

THE ANSWER

In order to deal adequately with this question it is necessary to make a number of points clear. Time-rates are fixed wages paid to workpeople and are based on the unit of time worked, whether the unit is an hour, day, week or year. It will be appreciated from this definition that time-rates have no direct relationship to the output of the worker during his period of employment. Piece-rates are payments made for a unit of output or "piece" of work completed by him. Under this system there is apparently no direct relationship with the time involved in the output of the unit or piece.

There is, however, some connection between the two conceptions, as, in fixing time-rates, the employer will have in mind a definite output from the worker during the unit of the time, whilst in determining piece-rates the employer will consider the number of units the average worker should

be able to produce during a given period with earnest effort.

In considering which of the two systems is to form the basis of the system of wage payment in any concern, several factors will have to be taken into consideration. The main desire of the employer is to obtain his output at the lowest possible labour cost and, therefore, he will desire to adopt a system which provides the greatest incentive to effort and, as a result, the greatest stimulus to output. The direct relationship between wages and output make the piece-work system the obvious choice where the quantity and not quality of output is the main consideration.

Although the piece-work system is finding increasing favour in industry generally, there are many valid objections to it. In the first place, in its pursuit of quantity it tends to encourage scamped work, and this entails an elaborate system of inspection. There is also the difficulty of agreement with the workers on the equitable basis for piece-rates. Even if this presents no difficulty, there is still the objection that the fact that a worker's earnings depend mainly on his own efforts induces him to be less co-operative in his relations with his fellow-workers, to the extent that *esprit de corps* in a concern is impaired or even destroyed. This lack of harmony raises serious problems connected with industrial relations. Finally, the workers themselves raise the objection that, from the social point of view, it is a brutal system in that it compels workers suffering from defective health to continue in employment in order to support their family.

On the other hand, the following reasons are often adduced in favour of time-rates. In the first place, it is the only logical system for remunerating such persons as foremen, supervisors and other employees similarly concerned with *directing* the efforts of the workpeople. The same argument applies in those cases where the productive process requires

skill of a high degree or the application of manipulative ability in relation to work of a delicate nature: obviously such work cannot be hurried without endangering quality. From the worker's point of view, the time-work system has the advantage of being easily understood, so that the calculation of his weekly earnings presents no difficulties. Further, it is regular and certain in the sense that should the workman be temporarily "off-colour" there is no compulsion to overstrain physical capacities to earn an income to meet the needs of his family.

In comparing the two systems, it will be seen that the piece-work system is preferable from the employer's point of view in that it enables him to judge the productive efforts of his workpeople and is directly related to output for the wages he pays. Obviously, the time-system has the greater appeal to the workpeople generally. Further, it will have been observed that both systems have their drawbacks, and in the case of piece-work the most serious is the tendency to the destruction of the *esprit de corps* of the labour force of the factory or workshop.

These defects have led to the development of various compromising devices intended to overcome the difficulties. Thus where it is possible, "group" piece-work rates have been introduced, by means of which each workshop or similar grouping of employees is paid a piece-rate, the total being shared equally between the workpeople comprising the group in order to ensure the preservation of the "team spirit". Other devices are output-bonus schemes, too complicated for detailed examination but each having the same object, namely, combining the best features of time-rate and piece-rate.

It is not possible to leave the question of the payment of wages without mention of such external influences on wages as the cost of living. A distinction must be made between money wages and real wages, i.e. the goods and

services which the money wages will purchase. It is evident that external influences such as an expansionist monetary policy will cause prices to rise and real wages to decrease. Generally speaking, a rise in prices will cause the profits of industry to increase, and this disparity between falling real wages and rising profits causes a great deal of industrial unrest. This has led to the adoption in some industries of the sliding-scale mechanism for the adjustment of wages to changes in prices as indicated by variations in the cost-of-living index number. The basis of this arrangement is essentially that the index at a particular time is taken as the starting figure upon which the basic wage is fixed. Then, as variations by a certain amount in the index number occur, the wages are adjusted accordingly.

It must be observed that this sliding-scale arrangement involves no new principle of wage determination, rather is it a mechanism for varying wages in accordance with changes in the general level of prices.

THE QUESTION

Under what conditions may a Trade Union establish a higher rate of wages for its members?

THE ANSWER

Most economists agree that the market for labour is not perfect in the sense that the bargaining power of the employer and the workman is based upon equality of bargaining strength.

The weakness on the part of the workman arises from the fact that his knowledge of the conditions of the labour market is very meagre and that he has, generally, no means of ascertaining the value of his services to his employer. Even if he had this knowledge, being without the means, he lacks the ability to withhold his services until he receives a wage from industry commensurate with what he considers

to be the value of his services. This is part of the argument put forward from time to time to show that the workman is "exploited". To remedy this inequality, workmen have grouped themselves into Trade Unions for the purpose of collective bargaining. The basis of collective bargaining is that the Trade Union officials are skilled negotiators with a knowledge of the market conditions for the labour of their members. They tend to turn this knowledge to good account against the background of current economic and social conditions. Being full-time officials and remunerated by the Trade Union, they are immune from any attempts at victimization by the employer. The bargaining strength of the Trade Union lies in the fact that they aim at achieving an organization which will have within its ranks the majority of the workpeople engaged in a particular trade or industry. In this way each Trade Union acquires almost a monopoly of the supply of labour—this monopoly position being frequently strengthened by imposing restrictive conditions upon the entry of new workers into the trade or industry.

It is evident that the retention of the bargaining strength of a Trade Union depends ultimately on the extent to which it is able to obtain improvements in the wages and working conditions of its members. There is, however, a limit to which Trade Unions can exact higher wages for their members. This upper limit will be eventually the selling price of the product of the industry and the reactions of this price on the amount of the product demanded. This point can be amplified in the following way. If a Trade Union succeeds in obtaining a wage that is above the marginal productivity of the workers at present employed in an industry or trade, the employers will be compelled by reasons of higher costs to restrict production, and this will entail the discharge of workmen until there is an equality between the wages paid and the marginal productivity of the remaining workpeople. The workers now

unemployed will increase the supply of labour available and thus, in the long run, depress wages in industry generally.

This reasoning ignores the fact that in some industries wages form a relatively small proportion of cost. It also ignores the fact that the demand for some products is inelastic and higher wages are reflected in higher selling prices and, as a greater part of incomes generally will now go to the purchase of this product, the demand for other commodities will fall off correspondingly and so cause unemployment in those other industries. These are, for the most part, short-run effects which could not continue to exist over a long period of time.

THE QUESTION

Discuss the economic possibility of a national minimum wage for a particular occupation.

THE ANSWER

In the early part of the twentieth century, the conditions under which labour worked in certain trades and occupations and the very low wages paid in those occupations led to their being described as " sweated trades ". There was an urgent demand for the State to intervene and to take steps to ameliorate these conditions. State intervention was to take the form of the establishment of a minimum wage for these sweated trades, and it is necessary to examine the implications which would arise if a minimum wage were fixed. In the first place, it is one thing to fix a minimum wage, but quite another thing to compel employers to give employment at this wage. It must be remembered that, very frequently, wages considerably lower than those generally obtaining in industry are paid to some workers because they lack the personal qualifications for obtaining a better wage such as is paid in other trades.

It follows, therefore, that if the minimum wage is fixed

at a high level, say considerably above that which previously prevailed, then there is the possibility that these employees may be dismissed and so driven to offer their services in other employments where the wages paid are even lower than those which they previously received. This tendency will be more pronounced if the minimum wage is high enough to attract better qualified workers from other occupations, and so effect a redistribution of labour between various trades. We must not overlook the possibility that the minimum wage may be such as to stimulate the employers to try to substitute capital in the form of labour-saving machinery for labour, a tendency which will accentuate still further the unemployment of the workers in those low-paid trades. This last effect may take some time to show itself, as there is no guarantee that employers will be able to command sufficient liquid capital immediately and so effect the extension in plant and machinery.

It must be pointed out that the fixing of a minimum wage must achieve its object in those cases where the organization of production cannot be easily changed and the demand for the product is relatively inelastic. In such cases it will be possible to pass the greater part of the higher costs occasioned by the minimum wage on to the consumer. Again, following the increased money wage (and real wage) there may be a rise in the productive efficiency of the workers, but this does not necessarily follow, as there is little evidence for believing that an increase in wages paid to the majority of workers in countries which are economically developed will result in any substantial increase in their productive efficiency. Thus, there is a definite limit to the operation of the principle sometimes known as the "economy of high wages".

To conclude, therefore, the imposition of a minimum wage will be of advantage to those who are retained in employment; the minimum will cause some unemployment

to the extent already discussed or cause a re-distribution of employment. The consumers of commodities produced by workers for whose benefit the minimum wage is established may suffer a diminution in purchasing power by reason of the higher prices they will have to pay where the demand for those products is inelastic.

THE QUESTION

What is meant by the Rate of Interest? How is it determined?

THE ANSWER

Interest can be defined as " the price paid for the use of loanable funds ". These loanable funds can be used either to purchase goods for immediate consumption or can be invested in the process of producing further wealth, in which case it fulfils the function of capital. It is with the latter function that we are chiefly concerned here, and, as the real nature of money as liquid capital has already been discussed (see p. 54), it can be said that, generally speaking, business men and investors must not only be able to recover such investments of liquid capital as may be injected into a business, but, in practice, in most business undertakings there is a return to capital over and above the amount invested. This return is known as interest, and the question arises why, after all the costs have been met, there exists a surplus, part of which constitutes interest, which is paid to those from whom capital has been borrowed, or is retained by the owner where he has provided his own capital.

Interest in this form, i.e. as a surplus, arises in the following way. In considering capital as an agent of production, we saw that the roundabout methods of modern productive organization placed an emphasis on the importance of capital and stimulated the demand for it. Further, that as a result of these roundabout methods, a return, considerably in excess of the cost of the services of land and labour

embodied in the portion of wealth forming capital, was the result.

It is obvious that unless there exists an influence which restrains them, entrepreneurs will naturally expand output by making use of capital goods (acquired with liquid capital) up to that point where the declining price of the product is just sufficient to cover the costs of the services of labour and land in making the capital goods, in addition to those services of labour and land in making the product itself. In the absence of interest there would be no limit to the use of capital goods in the form of machinery which would be substituted for labour wherever this was technically possible. Moreover, new undertakings requiring the expenditure of vast amounts of capital would be freely undertaken as interest on capital would not be a cost to be taken into consideration.

In this way, the payment of interest becomes a check on the unlimited expansion of output and to the unlimited extension of the use of capital goods. In point of actual fact, any industry will cease to expand its output at that point where a falling price is just equal to all costs which must be understood to include interest. Output will certainly not be expanded to such a point that the lower price at which a larger output will have to be sold, other things being equal, fails to cover interest charges.

As economic society is at present constituted, there is always a demand for liquid capital, and the question that has to be considered is why do lenders insist on being paid interest and are loth to lend liquid capital without it? The answer is to be found in the influence of two factors (*a*) Time Preference, and (*b*) Liquidity Preference.

Dealing with the first of these, time preference, we must recognize the existence of a natural inclination on the part of most people to prefer to have a certain amount of goods and services at the present time than an equal amount

at some time in the distant future. This can be described as a positive rate of time preference. It is seldom that a negative rate of time preference exists, by which persons prefer a certain amount of goods and services in the future than an equal amount now.

The reasons for the existence of this positive time preference are:

(1) The certainty of possession ("a bird in the hand is worth two in the bush").

(2) In the case of most persons, the satisfaction of present pleasures is of greater importance than the satisfaction of desires in the future.

Turning to liquidity preference, this consists of the preference to have a certain amount of hard cash rather than claims to cash against others.

If we take into account that both these influences will be at work, it becomes evident that a borrower of funds must offer an inducement to a lender to forgo the prospect of present satisfaction for satisfaction at some time in the future; and also to give up what is in effect cash now for a claim upon cash in the future. To put the matter in another way, the lender must be compensated for discounting present satisfactions in terms of the future.

The actual rate of time and liquidity preferences and, consequently, the rate of interest at which persons could be induced to lend will vary as between different individuals, depending upon circumstances and their psychological characteristics, but the following are some of the more general influences:

(*a*) The general expectation of life. Other things being equal, the older a person, the greater the valuation placed on present satisfactions.

(*b*) Where the future requirements of a person can be completely anticipated, that person will usually have a low rate of time preference.

In addition to this, there are some influences which are peculiar only to liquidity preference. They are:

(*a*) The desire to have a sum of cash to hand to meet unanticipated demands, e.g. in the case of a financial emergency.

(*b*) There may also be the desire for liquidity due to the knowledge or intuition that interest rates will rise in the future, and by keeping his funds in a liquid state now he may be able to invest them at a higher rate in the future.

THE QUESTION

"The demand for capital is a demand for loanable funds." Discuss this statement, showing the factors that influence these funds.

THE ANSWER

We have already seen that the two factors of time and liquidity preference will determine the amounts of loanable funds that will be forthcoming at various rates of interest; it follows, therefore, that the market rate of interest will be determined by the amount of the funds that the borrowers wish to obtain, and that this market rate of interest will settle at that rate at which the amount offered by lenders will be exactly equal to the amount borrowers will take.

In this discussion it has been assumed that the sole source of the supply of funds available to borrowers is that which comes from people who have the ability and willingness to save. Where, however, a society has a developed banking system, the banks are more likely to be suppliers of loanable funds than individual savers.

This arises from the fact that the banks are able to *create* funds which are available to borrowers. The real point being that, what a bank loans is not money in the ordinary sense, e.g. notes and coin, but claims against itself. With a given amount of cash, a bank may loan in the form

of bank credits something like nine to ten times the amount of cash on hand, which, it must be admitted, is likely to come in the first place from depositors who have saved it.

Borrowers generally borrow from banks in the form of a loan against security or a fixed overdraft, and from what has been said the amounts that the banks are able to lend will usually be greatly in excess of the amounts saved by individuals. The important thing is that the banks will have little or no time preference and, therefore, their policy as to the loans they are willing to make will be governed by liquidity preference. In this connection it is essential to grasp the fact that the credit position of the banks and the changes in the rate of interest are eventually determined by the policy of the Bank of England and any action it takes as the keystone of the nation's financial structure.

If we now consider the factors that determine the amount of loanable funds that borrowers would take at various rates of interest, we will have to note that where persons borrow for the purpose of acquiring consumers' goods, the rate of interest they will be willing to pay on the loan will depend on their time preference. But, as the bulk of loanable funds are acquired by borrowers who wish to invest them in production, the rate of interest these will be willing to pay will depend on the profits which are expected to accrue from the organization and expansion of any business. In other words, this rate will depend on the marginal productivity of capital, and the expected rates of return will be the main determinants in establishing the rate of interest that commercial borrowers are willing to pay for loanable funds.

Here, again, the marginal analysis can be applied to the position. It is the marginal borrowers and the marginal lenders who determine the actual rate of interest, which will be at that point where the amount that borrowers are willing to borrow is equal to the amount that lenders are willing to lend.

In conclusion, it is to be noted that, regardless of his rate of return on the amount borrowed, no borrower will pay more than the market rate of interest as a result of the competition among lenders.

THE QUESTION

"Interest is the reward of waiting." Discuss this statement.

THE ANSWER

It was formerly claimed that the rate of interest was in the nature of a "reward for waiting", or, as it was sometimes put, the "reward for abstinence".

It is sometimes difficult to understand what is implied in these statements. From the point of view of economic theory, "abstinence" or "waiting" can mean nothing more than spending less on the satisfaction of present pleasures and deferring consumption until some later date in the future. Adopting this view, interest would simply be the reward for not spending liquid capital now.

Neither can the statement be taken to imply that interest is the reward for saving, for frequently the loanable funds at the disposal of a person have not been saved by that person but have been inherited from ancestors who gained them in some way. Thus, the rate of interest received by the present owner who loans these funds cannot be said to be a reward for any peculiar sacrifice on his part.

THE QUESTION

What is profit? Who draws it and why?

THE ANSWER

In order that we can understand what we mean by the term profit, we had better define it in the following terms:

> "Profits can be considered as the net income accruing to the owners of businesses after all the costs have been accounted for."

Thus profits are residual in nature and accrue as a source of income only after those payments constituting costs, e.g. rent, wages and interest, have been met.

Generally speaking, the rate of profits is of a temporary nature as compared with rent, wages and interest. Further, profits arise from a monopoly position, i.e. "through the ability to *control output* so that the price will not fall to a point where it is only equal to cost of production". The implication being that the nature of the demand is such that at some point of output the price for the product will be in excess of costs.

As we have already made the point that profits emerge from a monopoly position, it is essential that we examine the source of this monopoly power. Now it may be said that monopoly power is derived from the ability to exert a control over the output of an industry, provided always the demand schedule for the product of that industry is known.

The power to regulate the output of an industry is derived from a variety of sources. Some of which are:

(i) Legal monopolies, which are a result of a Private Act of Parliament, and have the exclusive right to supply a public service. Railway companies, gasworks and electricity undertakings are good examples; in the same category is the British Broadcasting Corporation. Closely allied to these forms of legal monopolies are:

(ii) Those monopolies which derive their power from the possession of patent rights and copyrights. Both of these legal rights prevent competition in the supply of the particular product, and thus the possessors are able to exert a more or less complete influence over the output of these products during the period for which the right is in existence. It follows, therefore, that with such a complete control over supply the amount of profit and the continued existence of these profits will depend on the nature of the demand for the product in question.

(iii) There also exist monopolies and semi-monopolies which arise from agreements and combination between what have hitherto been competing businesses. The profits which these monopolistic combines are able to make will depend on their power to impose restrictive conditions on the output of their constituent businesses. Otherwise, with the fixing of a profitable selling price there will be every incentive for each of these constituent businesses to put on the market the maximum output each can produce. Again, such combinations must also be effective in excluding new entrants into that particular industry, otherwise the profits to be made will offer an inducement to new firms to enter the industry in an endeavour to gain a share of the excessive profits.

(iv) While we must not overlook the importance of the above sources of monopoly power, neither must we exaggerate them, for, in normal times, the most important source of monopoly profits is to be found in what is known as product differentiation. The purpose of advertising and publicity in all its forms is to " tie " purchasers to a product or group of products so that their spending activities in relation to these products is in the nature of a habit and creates a type of business goodwill which is based on the ability to retain these customers either by charging a price higher than that which is being charged by competitors or by selling at prices equivalent to those which competitors are charging, while, at the same time, enjoying lower costs of production. It will be appreciated that there is no way of predicting how long the profit-yielding advantage of such product differentiation will continue. Obviously the profits being obtained will attract new competitors, who will try to duplicate the product itself, its name and the type of package as closely as is possible without infringing any legal rights.

(v) Finally, another form of monopoly profit which may

often appear in combination with product differentiation is what is known as the profits of innovation. We often find that the first firm or firms to introduce on the market a new product, even though it may lack the legal protection of a patent or copyright, will make a profit for a time until competition duplicating the product and marketing the duplicate forces the price down to a point where costs of production are just covered. The profits of innovations may also be derived from a new process of production, the opening up of a new market, or even the utilization of a by-product.

The sources of profit already discussed, as we have seen, depend for their existence upon some monopoly element. In competitive industries, profits arise which are often termed " windfall " profits, since, generally, they are not anticipated by the entrepreneur and usually accrue as a result of causes beyond the control of any business firm. The two most common causes are:

(*a*) Currency inflation, which causes the prices of products to rise to an extent not anticipated by the entrepreneur. The inflation with its accompaniment of a rise in general prices may take the form of credit inflation which is usually an essential element of a trade boom, or it may be due to a deliberate policy of currency expansion on the part of the Government. Whatever the cause, the effects on profits will be the same.

(*b*) In competitive industry another source of windfall profit is a sudden and unpredictable increase in the demand for a product the increased demand being quite outside the influence of any monetary cause. It is often the case that there is a change in the character of demand. Thus in the early days of broadcasting it was thought that the demand for wireless sets would be in substitution of the demand for gramophones and records. Instead, there was a general development of the taste for music and a desire for the

repetition of items heard on the radio. The gramophone supplied the means for this repetition and, as a consequence, there was a boom in the gramophone and allied industries, profits soared to an extent hitherto unforeseen, and this continued until new competition was attracted into the industry.

Thus to summarize, profits are of a temporary nature and arise when the entrepreneur is able to produce a product or to organize his business in such a way that it exerts a monopolistic influence on supply.

THE QUESTION

Show the relation between Profits and Business Risks.

THE ANSWER

The monopolistic source of profits and the " windfall " nature of profit in competitive industries have already been discussed, but there remains the source of profit which emerges as the result of the risk involved in an enterprise.

Discussion on this source of profit must begin with the assumption that in a world in which events in the future could be equally foreseen by everyone, profit arising from the undertaking of risks could not exist, as all incomes could be resolved into payments as rent, wages and interest, and competition between the suppliers of these services and those desiring to acquire these services would prevent payments above the limits set by marginal productivity.

In the actual economic world, events cannot be foreseen. Further, there is constant change going on all the time and this makes for a dynamic society. This fact is used by Professor Knight in his work *Risk, Uncertainty, and Profit* to show the relation between uncertainties and risk.

He first defines what he understands by a risk as distinct from an uncertainty. He distinguishes first of all (*a*) Deductive Probabilities, which arise when an event occurring can be measured with certainty without recourse to a record

of previous occurrences. This type of probability rarely occurs in business experience and, therefore, lies outside the scope of this discussion. (*b*) Statistical Probabilities. Here, however, we have to calculate chances which are susceptible to a form of measurement based on the mathematical laws of probability. Given a sufficient number of instances, the chances involved are more in the nature of certainties, and thus uncertainties of this kind introduce no hazards into business as the general tendency of business people is to provide against any loss arising from this kind of uncertainty by the device of insurance. The insurance premiums paid become a fixed cost entering into the expenses of production. There remains that type of uncertainty which can be described as estimated probability. This type arises when the chances of an event occurring cannot be measured either from the nature of the transaction itself or from the record of previous occurrences. These risks are recognized by Professor Knight as the true uncertainties which are shouldered by the entrepreneur. Thus the greater the degree of uncertainty prevailing in any particular line of business and the more successfully the entrepreneur is able to bear these risks, the greater will be his profits.

In conclusion, it will be realized that these true uncertainties are inherent in modern society and arise from the dynamic nature of society, and will, therefore, have to be borne by society itself or, failing this, society will have to reward someone for shouldering these risks, and it is in this way that profits as a reward for risk-bearing appear.

Chapter 5

THE SOCIAL FUNCTIONS OF MONEY

THE QUESTION

What are the main functions of money in a complex society like ours? Show how the different constituents of our currency perform these functions?

THE ANSWER

In modern society, based as it is on the institutions of division of labour, a price system, and private enterprise, it is money which holds together these complex elements so as to enable society to function effectively.

The word " money " means different things to different persons, but the definition we can adopt for the purpose of this discussion is that money is:

> " Anything which is widely accepted in payment for goods or in discharge of other kinds of business obligations."

The question that now arises is what functions are performed by money ? In the first place, money serves as a unit of account ; in other words, it serves as a standard of value against which the value of other commodities can be compared. It is suggested by some writers that it was the performance of this function which first caused the emergence of money. Secondly, money serves as a medium of exchange and in so doing promotes the exchange of goods by eliminating the difficulties which underlie that form of direct exchange which we call barter. These difficulties which are present in the system of barter are summarized under the term " double coincidence ". Before the direct exchange of goods can take place, two conditions have to be present.

(1) The two parties must each have a surplus of some commodity they wish to exchange for something else; and that
(2) Each of these parties desires the surplus commodity of the other.

As will be appreciated, it is rare that these two conditions can be completely satisfied, and when we add the difficulty of arriving at a valuation of the two sets of commodities for the purpose of exchange, it will be seen that some medium of exchange had to be evolved in order that the elaborate system of exchange as we know it could develop.

Finally, and partly arising out of the preceding functions, money serves as a store of value. It will be realized that if we kept our wealth in the form of actual commodities, there is bound to be some deterioration and loss of value. On the other hand, if we exchange our goods for money, provided that the monetary system is sound, there will be no deterioration and no such loss of value.

For the performance of these functions most monetary systems are arranged in this way. There are usually two kinds of money which, for convenience, we can call ordinary money and bank money. We are not primarily concerned at this stage with the latter, but in the case of ordinary money this is issued on the responsibility of the State, which declares certain kinds of money to be *legal tender*. This can be described as:

> "Those forms of money which a creditor must accept in full and final discharge of business debts and obligations."

The monetary media in a country is either unlimited or limited legal tender. Formerly, when most countries based their currency on gold, the high value of the latter made it impossible to use it for small coins. To overcome this difficulty, what were known as "token coins" were put into circulation. These token coins have a high face value

in relation to their metallic content. They are maintained in circulation by reason of the fact that

(i) The supply is restricted to the amount just sufficient to meet the country's requirements for the making of payments involving small sums of money.

(ii) Owing to the low value of their metallic content there is no incentive to melt them down and convert them into bullion.

(iii) They are made legal tender for limited amounts only. Thus whilst £1 and 10*s*. Treasury notes are legal tender up to any amount, silver coins are only legal tender up to the amount of £2, and copper coins up to 1*s*.

In passing, it will be appreciated that the State makes a profit on the issue of token coins by reason of the fact that the value of the metal of which they consist is less than their face value.

It will be seen that, together, bank money (to be discussed later) and ordinary money perform the functions already set out. Indeed, it is difficult to conceive how the modern State could exist without money. It is certain that no extensive division of labour could exist without some kind of monetary media, for how could the services of, for example, a bank clerk be exchanged against the services of an electrician engaged on maintenance work in the very building in which the bank is established?

In conclusion, it must be emphasized that money in itself is not necessarily wealth, but, in the main, forms a number of claims to wealth. Thus the wealth of a country is not directly increased by increasing the quantity of money in circulation, but, paradoxically, money is very important in its influence on the welfare of the community, as any mismanagement of money may lead to a dissipation of those economic resources which constitute wealth and, therefore, contribute to the well-being of a society.

THE QUESTION

Discuss the quality which is considered to be the most important in any commodity which it is proposed to use as the money of a modern community.

THE ANSWER

Historically, many commodities have been used as money, and experience has shown that in order to be able to perform successfully all the functions required of the monetary media, the commodity of which it consists must possess the following qualities:

(1) The material must be relatively *durable*. Formerly, money consisted wholly of some form of metal, and in this way the requirement of durability was satisfied, but the modern practice is for the more valuable units of money to consist of paper, which is not durable, but the low cost of replacing worn or torn notes overcomes, to a great extent, the defects of paper in this respect.

(2) The material must be capable of being *divided* without any loss of value into small units in order to meet the demand for forms of money to make payments of small denominations. Thus, before 1914, when the currency in Great Britain consisted of gold coins, the sovereign (£1) was in circulation side by side with the half-sovereign (10*s*.), the latter containing half the gold content of the former. In the modern monetary systems in which paper money plays the important part, distinctive notes for various denominations can be easily printed.

(3) The material must be *stable in value*. It is obvious that a material which fluctuates in value very widely, and against which the value of other commodities is to be measured, is not likely to have the confidence of the population, as there will be a considerable reluctance to accept and to hold money for fear of a subsequent change in value.

This will lead to a breakdown in the monetary system and economic dislocation generally.

(4) The material must be *homogeneous*: that is to say, every unit must be uniform in quality and appearance: otherwise the general acceptability of money is likely to be affected.

(5) The material must also be *cognizable.* In other words, the money must be formed of a material and have such an appearance that the money itself and the value of the different units are readily identified as they pass from hand to hand in performing their function in society.

(6) The money must consist of a material which has a high legal or intrinsic value in relation to its weight and bulk. This is the quality of *portability*, upon which modern convenience insists.

(7) The material of which money consists must be generally *acceptable*, either because of some intrinsic quality, as in the case of gold, or because it has the legal authority of the State behind it, as in the case of most paper money. It is stated, often without qualification, by some monetary experts that this is the most important of the qualities of good money, and that the State can never impose a form of money on a community which the latter refuses to accept. Thus during the French revolution the revolutionary government attempted to impose a form of money known as "assignats" on the country, but the general lack of confidence in this form of money led to its ultimate withdrawal from circulation.

It is for this reason that the modern definitions of money tend to lay the greatest emphasis on the quality of acceptability of the monetary form.

THE QUESTION

What exactly is to be understood by the "Gold Standard"? Explain the varieties of this standard that have been adopted in the past.

THE ANSWER

In any discussion of money, the question of the Gold Standard is bound to have an important place, for the reason that it has been the monetary standard of most civilized communities over a long period.

The term "gold standard" implies a monetary standard in which:

> "The currency itself either consists of gold coins of a definite weight or fineness, or is itself convertible into gold of a definite weight or fineness."

To illustrate this definition we may point to the currency of Great Britain in the period prior to 1914. A gold standard was in existence, and the currency consisted of gold coins of unlimited legal tender known as sovereigns and half-sovereigns of the value of £1 and 10*s*. respectively. The sovereign consisted of 123·27447 grains of standard gold (11/12ths fine), while the smaller half-sovereign consisted of half this weight of gold of the same fineness. Side by side with the gold coins, token coins were in circulation owing to the impracticability of minting gold coins to serve as smaller units. These token coins consisted of silver and copper with a limited legal tender.

The value of gold as coin and as bullion was maintained almost automatically in this way. The statutory obligation was imposed on the Bank of England of converting gold bullion into coins at the rate of £3 17*s*. 10½*d*. per troy ounce of standard gold, and of converting coins into bullion at the same rate. In this way, the value of gold as coins and as bullion could never be widely separated. For example, if the price of gold as bullion fell below the equivalent of the statutory price of £3 17*s*. 10½*d*. per troy ounce, there would be every incentive for holders of bullion to sell it to the Bank of England in order to obtain the higher rate. The effect of this movement of gold to the Bank of England

would eventually result in a reduction in the supply of bullion and a rise in its price would in the long run ensue. Conversely, if the price of gold as bullion rose above the statutory price, new supplies of gold would find their way to the bullion market rather than to the Bank of England. There might even be a pronounced tendency to melt down the gold currency and so effect its conversion into and sale as bullion. This would increase the supplies of bullion, and, other things being equal, reduce its price. It will thus be appreciated why the value of gold as currency and as bullion varied only within very narrow limits.

Further, it is not difficult to recognize that, as between those countries with currencies based on a gold standard, the purchasing power of these currencies tended to a parity, for in the absence of any restrictive conditions on the movement of gold and of goods between the various centres concerned, gold would tend (within the limits imposed by the cost of transport, insurance and loss of interest) to move to those centres where its purchasing power was greatest. Similarly, goods would tend to move (within the limits by analogous conditions) to those centres in which they commanded the highest price in terms of gold. As between countries on a gold standard, therefore, the rates of exchange were inclined to represent the purchasing power of gold in those centres. It is for these reasons that there was a general agreement with the contention that the gold standard performed its functions almost automatically and with the minimum of conscious control. This type of gold standard is often described as the " full " or " pure " gold standard.

Following the war with Germany and during the years 1914–18, during which the pre-war gold standard had broken down under the abnormal strains imposed upon it, the return to something like normal trading conditions was accompanied by a desire to return to the gold standard in

some form or other. Consequently, two modifications in the old form of full gold standard found general favour.

The first of these was the Gold Bullion Standard. This form of gold standard had, many years previously, been advocated by Ricardo on the grounds that it would keep gold out of actual circulation and in this way its use would be economized. To obtain a clear understanding of this type of gold standard, reference can again be made to the experience of Great Britain, only this time during the years 1925–31. In 1925 there was a feeling among bankers and the officials of the Treasury that the time was opportune for a return to the gold standard. There was the difficulty, however, that the reserves of gold at the Bank of England did not permit of a return to the full gold standard. Further, during the war years, the money-using population had become more or less accustomed to the use of paper notes, and it was desired to arrange to keep paper money in circulation and by linking its value to that of gold, conserve existing gold stocks. The arrangement was such that paper money was made convertible into gold bullion in the form of gold bars weighing 400 troy ounces at the old statutory rate (£3 17*s.* 10½*d.* per troy ounce.). In other words, a person wishing to convert his notes into gold could only do so by spending £1,557 10*s.*, in return for which he would get a bar of gold weighing 400 ounces. This device was effective in keeping gold in any form from circulating side by side with paper currency, and both the internal and external value of currency was still linked with that of gold. The system just described was operated not only in Great Britain, as already mentioned, but also in the Argentine and other countries.

A second modification of the gold standard was the Gold Exchange Standard which, before 1914, already existed in the old country of Austria-Hungary, Holland, Japan and certain other countries; and, after 1914, Austria, Hungary,

Belgium and Germany. This modification of the Gold Standard resembles the Gold Bullion Standard in that it aims at providing paper money for the purposes of internal circulation, but differs in that it achieves the regulation of that currency with the value of gold by making provision for the holders of the currency to convert into gold at certain rates (very often this provision was nominal only) and for the holder of gold to exchange it for currency at the same rates. Further, the countries with this standard endeavoured to keep the value of the currency at a parity with gold by maintaining a greater part of their reserves in the form of foreign exchange, i.e. in the currencies of other countries on the Full Gold Standard or Gold Bullion Standard, or in short-dated obligations. This had the advantage that these reserves, deposited for the most part in other countries, earned interest, whereas if these reserves had been in actual gold they would have earned nothing.

In conclusion, it must be noted that the general tendency of countries on the gold exchange standard was to keep the exchange of their currency fixed in terms of the currency of one " base " country, but there was the risk that should this base country abandon the gold standard or devalue its currency its holdings in that country's currency would depreciate in value accordingly.

THE QUESTION

Inflation effects a compulsory redistribution of incomes. How does it bring this about? Set forth the classes of persons who gain and those who lose by the process.

THE ANSWER

In the case of those countries in which the money consists wholly of token units, i.e. paper money, the value of the currency is not linked with that of any external object. In such circumstances the value of the money will depend upon the total number of the monetary units put into

circulation in relation to total quantity of goods and services against which it is to be exchanged.

The great danger with such a form of money (which we can designate as inconvertible paper money) is that the ease with which the total supply of money can be increased leads frequently to inflation, which can now be defined as:

> "An abnormal and deliberate expansion of currency and credit beyond the amount necessary to supply the needs of trade at existing levels of prices."

The accompaniment of a policy of inflation is a rising price level. The effects, however, can best be considered in relation to the community generally. For all practical purposes the community can be divided into three classes, based upon the source of their incomes, which we can describe as:

(*a*) The Rentier Class (i.e. the owners of fixed-income-bearing securities) and those in receipt of fixed pensions.

(*b*) Persons in receipt of a wage or salary or an analogous income. This class is, numerically, by far the most important.

(*c*) The Entrepreneur Class (or business men).

By this classification it will be seen that we have covered substantially the greater part of the community in any society. Considering the effects of inflation on each of these classes:

(*a*) In the case of the rentier class and pensioners, where the rate of interest or the rate of pension is fixed before the beginning of inflation, with each rise in prices the value of the income, in terms of purchasing power, decreases. In consequence, this class suffers the most severely as a result of inflation.

(*b*) The Wage-earning Class. Notwithstanding the effectiveness of any trade union or professional organization,

the income of this group will always tend to lag behind the rising level of prices. It is almost impossible for adjustments in wages and salaries to be made rapidly enough so as to keep pace with prices, even where wages are adjusted by references to a cost-of-living Index Number, as changes in prices must take place *before* a change occurs in the Index Number. Thus this class suffers a loss of purchasing power, but insofar as there is some adjustment of income to prices, the loss will not be so great as in the case of Class (*a*).

(*c*) The Entrepreneur Class (in which we can include business men generally). On the whole, this class gains, for the following reasons. The period of rising prices stimulates all forms of business activity and the entrepreneur is in this position:

(i) He has previously contracted to pay out fixed sums of money in the forms of rates, taxes, etc., and these, with rising prices, bear a smaller ratio to turnover.

(ii) His costs of production, including wages and salaries, do not rise as rapidly as the general level of prices, and the difference between them becomes a gain to him.

Business activity is also affected by an expansion in the amount of capital available to the entrepreneur during a period of inflation. This increase in the amount of liquid capital available comes about as a result of:

(i) The temporary excess of currency in circulation.

(ii) The increased business profits, which may be "ploughed back into the business", or which attract an increasing volume of investment into all forms of business activity.

(iii) By the rise in the market value of industrial securities, which attract investors from gilt-edged to new issues of industrial securities with a consequent stimulus to the expansion of business.

From this, the fact emerges that during a period of

inflation there is a general loss of income on the part of the rentier class, pensioners, and wage and salary earners. The class gaining during the period will be the entrepreneur class and business men. Finally, the fact must not be overlooked that the issuing authority responsible for the inflation will also largely gain. This gain will be equivalent to the amount of purchasing power represented by the difference in the price-level before and after each amount of inconvertible paper is injected into the monetary system. In other words, each holder of currency loses a certain proportion of purchasing power as the process of inflation continues and prices rise. This lost purchasing power is automatically transferred to the issuing authority, i.e. the Government. For this reason, inflation was described by Lord Keynes some years ago as an " insidious form of taxation ".

Before leaving this topic, it must be pointed out that, eventually, as a result of inflation, a monetary crisis supervenes, i.e. when the purchasing power of money has to be re-established. It may happen that this process of stabilization may be effected by deflation which can be described as :

> "A contraction of currency, and usually of credit, relative to trade requirements at the existing level of prices."

The diminution in the amount of money in circulation which forms the essential basis of a deflationary movement has an effect on the classes of the community already enumerated almost the reverse of those which occur during the preceding inflationary period. The rentier class and pensioners whose incomes have been fixed during the high price level now find that their income has an increasing purchasing power as prices fall. In the case of the wage-earner and salaried employees, incomes tend now to lag behind the falling price level and moreover they tend to resist vigorously any attempt to reduce wages. The extent

to which they successfully maintain their wages at former levels will indicate the corresponding gain to them.

The entrepreneur class and business men suffer a loss as they are producing and marketing goods during a period of falling prices, which usually fall more rapidly than do costs of production. Moreover, credit tends to contract and, as interest rates are high, it becomes more and more difficult to raise loans.

The entrepreneur will generally attempt to reduce costs by imposing wage reductions. These are naturally resisted by the wage-earners, with the result that a period of deflation is usually a period of industrial unrest.

THE QUESTION

State and discuss the Quantity Theory of Money.

THE ANSWER

In the case of money, as we have noted, its value, i.e. its purchasing power, will be determined by the relationship between the demand for money and the supply of it available. This is the case with all commodities, and money is exceptional only in the fact that changes in it do not show themselves in variations in any one price, but of all prices taken together.

The supply of money at any given point of time will be the total amount in existence at that given moment, but there is another factor which must also be considered when discussing the supply of money, namely, its velocity of circulation, i.e. the number of times each unit changes hands when transactions are effected over an arbitrary period of time.

The demand for money arises from the need for effecting transactions, i.e. the buying and selling of goods and services. Thus, money is " held " in the sense that it is kept for the purpose of being handed over in exchange for economic goods. It is argued, therefore, that the demand for money

over a certain period of time can be expressed by the monetary value of the transactions that are effected in the course of this period. In other words, the monetary value of goods and services bought and sold in the course of a period can be taken to represent the demand for money.

These assumptions form the basis of the Quantity Theory of Money, which, although very old in the principle which it expresses, owes a great deal of its modern formulation to Professor Irving Fisher, whose formula can be explained as follows. On the assumption that the total amount of money exchanges against the total quantity of goods and services, the value of money is taken as given, and subsequent changes in this value are then explained. When an article is exchanged for money its price is equal to this sum of money and, therefore, the position can be expressed be saying that, given $P =$ average prices (or the price level) and $M =$ the amounts of the units of money, and $V =$ the velocity of circulation of that money, then

$$P = MV$$

Now the total quantity of goods and services, multiplied by the prices at which they are acquired, can be expressed by the symbol PT. P has already been defined, and $T =$ the volume of trade; in other words, transactions in which goods are offered against money.

We get, therefore, the following formula:

$$PT = MV$$

It has been stated that " This equation of exchange is the most widely known generalization about money ", and from it we get the following:

$$P = \frac{MV}{T}$$

To complete this formula, account must be taken of representative money such as bank credits, which take the

place of money. We can express it in the formula by M', and as it has a velocity of circulation, the latter can be expressed by the symbol V'. The complete formula now becomes

$$P = \frac{MV + M'V'}{T}$$

The implications of the theory, as expressed by this formula, is that if P is doubled (that is the general level of prices has doubled), this result may have been caused by a doubling of M or V, or a halving of T. It is not, however, possible to say which of these changes is responsible for the change in P.

If the explanation offered by this expression of the Quantity Theory of Money is accepted, there arise the following criticisms. In the first place, even if P is doubled as a result of the doubling of M or the halving of T, the fact is still unexplained as to the factors that have caused the changes in M or T and, further, the way in which these changes have reacted upon P.

Again, there is the objection that the theory takes the value of money for granted and no explanation is offered as to how money gets its value in the first place.

Finally, by saying that a doubling of M results in a doubling of P, the conclusion is that the elasticity of the demand for money is equal to unity. This conclusion does not correspond to reality. For example, in Germany during the period of inflation which followed the cessation of hostilities, the quantity of money in circulation was increased, prices rose even more rapidly as people discounted the value of money more and more in terms of the future. That is to say, that transactions on a particular day were conducted at prices that could be expected to rule some days in the future. The reason was that people knew that prices were rising and the value of money in consequence

was falling. It was more rational to hold goods instead of money, and where goods had to be given up, it was at a price which it was anticipated would rule when the acquisition of new stocks would take place.

The truth of the Quantity Theory of Money lies in the fact that it demonstrates that changes in the value of money are the results of the relationship between the amount of money in circulation and the goods offered against it.

THE QUESTION

Write a short account of the British Currency Changes since 1914.

THE ANSWER

In 1914 Great Britain was on the full Gold Standard, and the currency in circulation consisted of gold coins. On the outbreak of war, on 4th August, 1914, certain steps were taken by the Government to protect the gold stocks which, it was realized, would have to be used in order to acquire raw materials and supplies from countries abroad.

Gold currency was withdrawn from circulation and replaced by currency notes of the denomination of £1 and 10*s*. Further, the Bank of England, although nominally retaining its statutory obligation to convert currency into gold at the rate of £3 17*s*. 10½*d*. per troy ounce, did so only in special cases, but gold could still be taken to the Bank for conversion into currency at the statutory rate. Prohibitions on the export of gold were also imposed and, in this way, although the gold standard still existed in name, in practice it had been abandoned.

From 1914 onwards, the issue of paper money, known as Treasury notes, was secured by silver bullion, Bank of England notes, and Government securities. The monetary requirements of the Government and the ease with which these requirements could be met by the unrestricted issue of paper money led to inflation. The position became

such that, in 1918, the position of the country's currency was the subject of an investigation by the Committee on Currency and Foreign Exchanges, appointed by the Treasury. The Committee confirmed that there was inflation and recommended that the issue of Treasury notes should be gradually reduced by fixing the maximum fiduciary issue of one year as the maximum fiduciary issue for the following year. This limitation to the issue of paper currency was known as the "Cunliffe Limit" (after the name of the Chairman). From 1920 onwards, the limit was put into operation and strictly adhered to, with the result that the number of uncovered notes was greatly reduced. It should be pointed out that the operation of the limit was not provided by law, but was embodied in a Treasury minute and could, therefore, be rescinded at any time.

By 1925 the purchasing power of the pound sterling had increased to such an extent that it was considered to have reached a parity with its former gold content, and there was a strong feeling held in official quarters that a return to some form of the Gold Standard was desirable. In 1925, therefore, Great Britain returned to the Gold Bullion Standard. This modification of the Gold Standard, while linking the value of the currency with gold, effectively kept units of gold out of circulation, being replaced by the issue of paper money.

In 1928 it was considered that the time had arrived to place the issue of Treasury notes on a proper basis and under the single control of the Bank of England, which still continued to issue its own notes of the value of £5 and multiples thereof. Accordingly, the Currency and Bank Notes Act of 1928 was passed, and, thereby, effected certain necessary changes in the Bank Charter Act, 1844, and the Bank Act, 1826. The result was that pound notes and ten-shilling notes became Bank of England notes and were

legal tender in England, Wales, Scotland and Northern Ireland for the payment of any amount. Further, Bank of England notes of £5 and multiples thereof are legal tender *for all amounts of £5 and over.*

The Gold Bullion Standard was in operation in Great Britain until the end of 1931, when the Gold Standard was abandoned by the passing of the Gold Standard (Amendment) Act, 1931, which relieved the Bank of England of its obligation to exchange gold bullion (in bars of 400 troy ounces) in exchange for notes at the rate of £3 17*s.* 10½*d.* per troy ounce. The events which were responsible for this change of monetary policy can be summarized as follows:

(1) There was a decline in exports in the post-war period due to:

- (*a*) Loss of overseas markets when those countries to whom we had previously exported now manufactured their own goods.
- (*b*) The prices of British goods were generally high as costs of manufacture were, on the whole, high.
- (*c*) The policy of restrictive tariffs operated against imports from Great Britain.
- (*d*) The return to the Gold Standard in 1925 placed too high a value on the purchasing power of the pound sterling. This over-valuation of the pound sterling meant that British goods were now about 10% higher in price than formerly. Foreign purchasers now bought from other sources.

(2) There was a marked increase in imports because:

- (*a*) Great Britain represented a relatively open market for foreign goods owing to its free trade policy.
- (*b*) The foreign exporter to this country benefited

because of the over-valuation of the pound sterling, which meant that he got a higher price for his products here. This led to a species of dumping of goods.

(*c*) The redistribution of incomes which had followed the war of 1914–18 meant that, on the whole, a greater portion of purchasing power had been placed in the hands of the working-class generally. This increased purchasing power was expended in such a way as to stimulate imports of foodstuffs and raw materials.

In addition to these causes, there was the peculiar situation which arose on the return of this country to the Gold Standard. In the first place, during the general inflation period following the conclusion of hostilities, the foreign owners of funds sent them to the United Kingdom in order to place these funds in a country with a stable currency. Accordingly, there was a deposit of funds withdrawable at short notice in this country. The adoption by many countries of the Gold Exchange Standard resulted in many of them holding their reserves in the form of sterling which could be converted into gold on demand. At the same time we were lending freely abroad on long-term conditions.

From July 1931 onwards there was a steady loss of gold from the Bank of England. Many causes contributed to this; for example:

1. Monetary crises in Austria, Hungary and Germany made foreign bankers nervous as to the future and they repatriated gold from Great Britain to their own countries.
2. This tendency was accentuated when it was realized that Great Britain was heavily involved financially in Germany, which was not only unable to meet its reparation payments but was also suffering severely from a series of bank failures.

3. Confidence in the position of sterling was also adversely affected by the publication of the Macmillan Report, which revealed certain weaknesses in our banking and financial structure; and the report of the Committee on National Expenditure (the May Report) which confirmed the suspicion that the condition of our national finance was not so healthy as was commonly supposed.

The combined effects of these causes led to a "flight from the pound sterling" and withdrawals of foreign liquid balances in gold and other forms reached the figure of £200,000,000 by the end of September, being further assisted in the tendency by the uncertainty of the future political situation.

There was no alternative but to pass the Gold Standard (Amendment) Act, 1931, and abandon the Gold Standard.

Chapter 6

THE BRITISH BANKING SYSTEM

THE QUESTION

Give a short description of the main elements of the banking system of Great Britain.

THE ANSWER

The banking system of Great Britain consists of two sets of institutions, namely:

1. The Joint Stock Banks; and
2. The Central Banking Organization.

Dealing first with the Joint Stock Banks. When the Bank Charter Act, 1844, established the Bank of England as the most important institution in English banking (with the sole power of issuing paper money which was legal tender for certain amounts) there was, at the same period, a general demand for banking services due to the rapid development of British industry. As a result of these two influences, there followed an increase in the number of Joint Stock Banks, which gradually expanded their activities to cover the whole country, and in this way acquired considerable financial influence. Following the war of 1914–18, the process of amalgamation of the banking institutions resulted in the formation of five great banks—the Midland Bank, Barclays Bank Ltd., Lloyds Bank Ltd., National Provincial Bank Ltd., and the Westminster Bank Ltd., each having branches covering the whole country.

The legal prohibition on the issue of paper money formerly considered to be an essential element in banking practice, has given way to the cheque system. The essential feature of this system is that a customer having made a deposit of some form of money with his bank now has the right of

drawing cheques against these deposits for any desired amount as and when required. The only limit to this right is the size of the deposit and the amount of credit the banker is willing to give to the customer. The convenience and relative safety of the cheque system has popularized it to the extent that it has become the most important method of liquidating commercial obligations. In addition to the provision of the cheque system, the joint stock banks provide facilities for the deposit of money in current and deposit accounts; they make advances to customers; discount bills of exchange; and provide facilities for certain forms of investment.

The Bank of England is the Central Bank, and as such is the most important financial institution in the country. According to the Macmillan Report, a Central Bank (such as the Bank of England) performs four functions, namely:

1. It holds the gold reserve of the country.
2. It controls the issue of money.
3. It is the State banker.
4. It serves as the banker's bank (i.e. the joint stock banks keep an important part of their reserves in the form of a deposit at the Bank of England, upon which they can draw cheques).

To perform these functions effectively the Bank must keep its resources in such a liquid condition as will enable it to meet all the demands that may be made upon it at any time. As the arbiter of the nation's monetary position, it has the power to bring about variations in the volume of credit by altering its discount rates, which react upon other rates in the market including interest rates. The effect of altering the volume of credit is ultimately to cause changes in the price level and so react upon the foreign exchanges.

THE QUESTION

What is the Clearing House System in relation to the banks? What functions does it perform?

THE ANSWER

The establishment of the Clearing House system has been a necessary accompaniment to the rapid and extensive development of the cheque system throughout this country. The essential purpose of the system is to provide facilities whereby those banks which are members of the Clearing Houses can offset their mutual indebtedness as represented by cheques drawn by the customers of each bank in favour of the customers of the others.

The modern development of this form of organization dates from the year 1854, when the joint stock banks came into it and the principle of settling outstanding balances by means of cheques drawn on accounts at the Bank of England was introduced.

To-day, Clearing Houses exist in a number of local centres, e.g. Birmingham, Manchester and Liverpool, dealing with cheques drawn on banks in these localities. The most important Clearing House organization is that of London, which is divided into three sections:

(*a*) THE TOWN CLEARING—covering banks in the Central or City area of London (indicated by the letter "T" on cheques).

(*b*) THE METROPOLITAN CLEARING—dealing with the cheques of banks in the metropolitan area of London (indicated by the letter "M" on cheques).

(*c*) THE COUNTRY CLEARING—this deals with the cheques on banks outside the areas of the other two clearings (indicated by the letter "C" on cheques).

The method of operation is as follows. On receiving cheques for collection, each bank sorts them into bundles or "charges" representing claims against the other banks. At the clearing house, these charges are presented to each of the other banks and the amounts they represent are offset by the charges of the other banks against it. The general system of offsetting these amounts obviates the necessity of

transferring large amounts of cash from one bank to another, and only the balances remaining after the offsetting of charges is liquidated, and then by means of a cheque drawn by the debtor bank on its account at the Bank of England.

THE QUESTION

Define " Credit ". Do banks create money? Is there any limit to the power of the banks to create credit or money?

THE ANSWER

Credit may be defined as " purchasing power not derived from income, but credited by financial institutions either as an offset to idle incomes held by depositors in the banks or as a net addition to the total amount of purchasing power ".

Insofar as credit has been defined as " purchasing power ", thus assuming the function of money, it can be regarded as a form of money for most practical purposes. The question arises as to the way in which banks can " create " this form of money. Perhaps the best way of approaching the question is to assume that a person wishes to borrow from the bank, and, providing the conditions are suitable, the bank will usually arrange for the borrower's account to be credited with the amount of the loan. The position can now be made clearer by further assuming that the bank from which the loan is made is the only one in existence. In this case, when the borrower wishes to make payments to his creditors, he will do so by drawing cheques on the credit balance allowed him by the bank. When the cheques are paid over to his creditors, the latter will pay the cheques into their accounts, as deposits, thus effecting a transfer of balances from one account to others. The basic position is not in any way changed because of the fact that instead of one bank there are several, the effect is always the same, namely, that the loan, which is merely a right given to the borrower

to draw upon the bank up to a certain limit, has resulted in an increase in the deposits of that bank or other banks. This is the explanation of the maxim that "every loan creates a deposit".

Bank deposits can be similarly created each time the bank makes a purchase of securities or any other form of property. The cheque given by the bank in order to acquire the purchase will be deposited by the seller in his account in his bank, and in this way the sum total of bank deposits is increased.

It will, of course, be realized that in acting in this way, what the banker has actually created is the *liability* of having to meet the payment of the cheques in cash, but it has to be pointed out that the whole of this system whereby this form of money or credit is created depends upon the fact that only a very small proportion of the cheques drawn upon him in consequence of a loan he has made will actually be presented to him for payment in the form of cash.

The interesting question now arises as to the existence of any limiting factors upon this power of the banker. The answer lies in the fact that every bank must keep available a certain amount of cash (or "till-money") in order to meet the demands of its customers. As a result of experience it has become customary for each bank to keep a cash reserve representing approximately 10% of its liabilities in the form of deposits. This reserve of 10% is kept in the form of one-half in actual cash and one-half in the form of a balance at the Bank of England (which is obviously as good as cash). It is the fact of the necessity of keeping this cash reserve which limits the power of the bankers to create deposits, for by creating credits—and ultimately deposit liabilities—the bank cannot in the interests of safety allow the cash reserve to fall below 10% of its deposit liabilities.

We can thus appreciate what has been pointed out by Mr. Geoffrey Crowther in his *An Outline of Money*, that in

the business of banking there are many paradoxes. No banker could pay all his liabilities in cash on demand if they were all to be presented at once. In this sense the banker is always insolvent. However, the whole business of banking depends upon the reputation of the banks for solvency, i.e. upon the belief of the public in the ability of the banks to meet every demand made upon them for cash without question or hesitation. Thus it follows that the greater the banks' reserves the less will they be needed. On the other hand, the less cash that the banks have, the more they are likely to need.

THE QUESTION

Classify the items of which a Joint Stock Bank's assets are made up. Show the approximate proportion under each heading and examine the relative convertibility of the assets.

THE ANSWER

The fundamental characteristic of the policy of the joint stock banks in relation to the distribution of their resources between the various forms of assets available is that it is in the nature of a compromise between three conflicting requirements, namely :

1. The requirement of security. That is to say, that the assets must be such as will enable the demands of the shareholders to be met.
2. The desire for liquidity. In other words, in view of the ultimate responsibility of the banks to meet the demands of the customers in cash, a large proportion of the resources of the bank must be kept in the form of cash or assets readily convertible into cash.
3. The desire to make through its operations a profit to be distributed among its shareholders in the form of a dividend.

In order to achieve this compromise the resources of the banks are distributed between different assets, as follows:

1. COIN, BANK NOTES, AND BALANCES WITH THE BANK OF ENGLAND. This item can be regarded as completely liquid. Coin and bank notes represent 50% of the total of this form of asset, the other 50%, namely, balances with the Bank of England, can, for practical purposes, be regarded as equivalent to cash. Although the total of this item varies, it can usually be regarded in the aggregate as being between 10% and 11% of the bank's deposits. (*N.B.*—There is no earning on this item.)
2. MONEY AT CALL AND SHORT NOTICE. This comprises loans made by the banks to various members of the Money Market such as Discount Houses, Bill-Brokers, Accepting Houses, and operators on the Stock Exchange. This item is, after Coins and Bank Notes, the most liquid part of the total assets of a bank, as the loan involved can be recalled practically on demand or, at the longest, within a few days. According to the report of the Macmillan Committee this item represents about 7% of the bank's deposits and earns for the bank about $3\frac{1}{2}$%.
3. BILLS DISCOUNTED. This item consists of holdings of Commercial Bills and Treasury Bills which become liquid as they mature, although they can be rediscounted before maturity, if necessary. In recent years the holding of Commercial Bills has been considerably reduced, while the holding of Treasury Bills has, on the whole, tended to increase. The total item represents about 15% of the assets and earns about $4\frac{1}{2}$%.
4. INVESTMENTS. British Government Securities (Gilt-edge securities) form the greater part of this item in the interests of security. The market value of these securities is subject to fluctuations, but on the whole

the *yield* is about $4\frac{1}{2}\%$. Investments represent about 12% of the bank's assets.

5. ADVANCES TO CUSTOMERS. These are by way of loans or overdrafts to the customers of the banks, and can be considered as the most profitable of all the assets, although, generally speaking, they lack liquidity. It must be remembered that the object of the banks is to provide commerce and industry with its working capital in the form of short-term loans. The practice is, therefore, for the period of these loans very seldom to exceed six months' duration and to require adequate collateral security. About 55% of the assets of the banks are represented by this item.

It is by spreading resources between different assets in this way that the banks are able to effect the compromise already mentioned so essential to successful banking practice. At the same time, it is also worth noting that the regulation of the whole structure of banking can be effected by measures designed to alter the volume of the cash item, and it is, therefore, in this way that the Bank of England is enabled to exert such a predominant influence on the nation's credit policy.

THE QUESTION

Give a short account of the institutions comprising the London Money Market. What are their functions?

THE ANSWER

The London Money Market is the convenient description given to those institutions centred in the vicinity of the Bank of England, including Lombard Street. They are mainly concerned in dealing in money and credit. Generally they are: (1) The borrowers of funds; (2) the lenders of funds; and (3) the Bank of England.

The borrowers of funds can be discussed under the following headings. In the first place there are the Bill-

Brokers, Discount Houses, Accepting Houses, and dealers on the Stock Exchange. These have one thing in common, namely, that they are the main borrowers of funds from the Joint Stock Banks. The individual functions of these institutions can be described as follows:

(*a*) Bill-Brokers. These are dealers in Bills of Exchange. The brokers have a tendency to specialize in bills of a particular class, for which they can usually find a ready market. As they are not usually in a sufficiently strong financial position to hold the bills until maturity, it is for this reason that the bill-brokers borrow funds in order to acquire bills in order to sell them again at a small margin of profit.

(*b*) Discount Houses. These perform functions similar to those of bill-brokers, but owing to the possession of greater financial resources they can operate on a larger scale. Although they are large borrowers of funds from the market, on the whole they tend to hold a proportion of the bills they acquire until maturity.

(*c*) Accepting Houses. These are frequently known as "Merchant Bankers", and perform the function of lending their name (and, therefore, their credit-standing) to a bill on behalf of a customer in order that the latter may be able to get it discounted. Of course, they charge a payment for this service.

(*d*) Dealers on the Stock Exchange. In the ordinary course of business, dealers in Stock Exchange securities do not find it always possible to effect a balance between buying and selling orders on a given day. There must be always, therefore, a large amount of stocks and shares in the course of transit from buyer to seller. These securities have to be paid for by the brokers and jobbers and they have recourse to borrowed funds for this purpose.

Secondly, there is the main source of funds available to these institutions mentioned above, namely, the Joint Stock Banks, which have already been fully considered.

Finally, there is the keystone of the whole structure of the London Money Market, i.e. the Bank of England, which exercises through its policy the ultimate control over the nation's monetary and credit position.

It must be observed, however, that the structure outlined is peculiar to England and has this feature, not to be found in other countries, namely, that the Bill-Brokers, Discount Houses, etc., intervene between the Joint Stock Banks and the Central Bank. This enables the former to replenish their cash reserves should the occasion arise by calling in their loans at call or short notice to the bill-brokers, etc., instead of having direct recourse to the Central Bank, as is the case with most other countries.

THE QUESTION

What are the " Open Market Operations " of the Bank of England or other Central Banks, and what is their object?

THE ANSWER

The rate of discount charged by the institutions forming the London Money Market, other than the Bank of England, for discounting Bills of Exchange and making advances, is known as the " Market Rate ". This market rate is always lower than what is known as the " Bank Rate ".

The " Bank Rate ", or the " Bank of England Minimum Rate of Discount ", is the official minimum rate at which the Bank of England will discount " first-class " bills.

Now, owing to the fact that the Market Rate is lower than the Bank Rate, it follows that holders of bills will not take them for discount to the Bank of England or borrow from that institution if they can get accommodation at the lower market rate. Further, there will be no resort to the

Central Bank unless compelled to do so. To be effective, therefore, changes in Bank Rate must be accompanied by corresponding changes in the Market Rate.

Formerly, the financial position of the London Money Market was such that it could only carry on its business effectively by borrowing directly from the Bank of England, but with the enormous financial strength of the Joint Stock Banks and the natural desire of these to find constant employment for their funds, the Money Market is less dependent on the Bank of England. This fact means that if funds are plentiful the raising of the Bank Rate will have little or no effect on the general credit position.

The Bank of England has recourse, therefore, to another means in order to control the amount of credit. This is by what is known as " Open Market Operations ". Briefly, this means that the Bank places itself in the position of a borrower of funds by selling securities on the open market. The purchasers pay for these securities by means of drafts on the Joint Stock Banks which, in turn, have the effect of reducing the amount of the balances these have with the Bank of England. To restore these, the Joint Stock Banks are unable to lend so freely to the Market; they may even call in loans on call, in which case the normal borrowers of funds on the Market are forced to go to the Bank for accommodation, which is given at the higher bank rate—in other words, the market is forced into the Bank—and so the change in the Bank Rate becomes effectual.

It is in this way, through changes in the Bank Rate, reinforced if necessary by Open Market Operations, that the supply of loanable funds in the market is regulated in accordance with the policy of the Bank. It is contended by some writers that, in practice, market rates do have a tendency to follow changes in the Bank Rate, and that this sympathetic movement is nothing more than a process of intelligent anticipation on the part of the market which is

fully aware that by means of Open Market Operations the Bank can insist on the tendency indicated by the Bank Rate being observed.

In conclusion, there is a further point of interest, namely, that changes in the Bank Rate, when effective, have the result of altering the quantity of bank money in circulation; in other words, of affecting the supply of purchasing power with corresponding effects on the general price level. Thus when the Bank Rate is raised the result is ultimately a fall in the price level, while a reduction in the Bank Rate, by making a greater amount of bank money or credit available, will generally tend to make prices rise.

THE QUESTION

Give a short description of the Stock Exchange and its functions.

THE ANSWER

It must be emphasized from the start that the London Stock Exchange (and also the provincial exchanges) provides a market for capital already invested in industry. This emphasis is necessary as there does not exist in Great Britain an organized market for new capital.

With this point clear, we can turn to the consideration of the Stock Exchange, an important characteristic of which is that, as a voluntary association, it is independent of any direct legislative control. Its affairs and policy are determined by a Committee for General Purposes and by the Management. The committee consists of thirty members elected from among the members, and exercises a variety of functions, including the adjudication of disputes between the members.

The members of the Stock Exchange fall into two classes, namely (*a*) Stockbrokers and (*b*) Jobbers. Stockbrokers are not actual dealers in the stocks and shares, but perform the functions of intermediaries between the public and the

dealers in securities. They are supposed to rely for their profits on the commissions they receive from the public; they are not supposed to deal in securities in large amounts for their own profit. On the other hand, the jobbers derive their profits by dealing in the stocks and shares. These profits arise from what is known as the "jobber's turn", that is to say, the difference between the buying and selling prices of the various securities which they quote to the stockbrokers. In these dealings the operations of the jobbers fall into two classes, described by the term "bulls" and "bears".

Jobbers who buy securities which they consider are, at present prices, under-valued and which they acquire in anticipation of a rise in price, are called "bulls". They buy securities they do not intend to hold in the hope that prices will rise above the price at which they have purchased and so enable them to dispose of these securities at a profit.

"Bears" is the term given to jobbers who anticipate a fall in the price of certain securities and, therefore, sell securities which they do not possess in the hope of forcing down their price to a level when they can acquire them in order to satisfy their original selling obligation, the difference between the price at which they originally sold these securities and the lower price at which they eventually acquire them constituting their profit.

A point which it is necessary to make is that these operations may take place without the dealers having paid over any part of their financial resources, although there was always that likelihood in view of the risk involved. This can be explained by saying that a small proportion of the dealings in these shares in normal times takes place for cash, the majority of the dealings being "for account" or for the "settlement". The latter is the name given to certain specified dates on which the transactions must be completed

by the payment of cash or the transfer of securities. It will be appreciated, therefore, that in the period between the settlements a jobber may engage in a transaction by which he buys shares (the actual transfer to him not taking place until the actual settlement) and then sells them before the settlement to a purchaser at a higher price. The organization for the settlement is such that it is only during the period comprising it that the names of the actual seller and the ultimate buyer are determined, and it is thus that the jobber is able to engage in dealings involving so little of his own resources, i.e. if his knowledge is sound or his judgment correct.

A word is necessary about what has been referred to as the source of profit of the jobber, namely, the "jobber's turn". This represents the difference between the buying and selling prices of securities and occurs in this way.

When the stockbroker receives a commission from a client to buy certain securities he approaches the jobbers who specialize in dealings in this particular type of shares and asks for a price, not mentioning whether he is a buyer or seller of these securities. The jobber quotes two prices, the lower being the price at which he will buy and the higher the price at which he is willing to sell these securities. The prices represent the current market value and the difference between the two prices quoted will form the "jobber's turn" and, in view of the fact that the jobber is bound to make a market in the securities in which he normally deals, it is likely to be at a minimum, especially as he does not know when he quotes the price whether he will have to buy or sell.

In conclusion, the economic function of the Stock Exchange will have to be considered. In the first place, it provides a market for invested capital by facilitating the transfer of that form of capital, making it possible for the holders to realize stocks and shares should the occasion

render this necessary. Secondly, the operations on the Stock Exchange tend to classify the securities according to their capacity for earning dividends and the future possibilities of the concern the shares represent.

Against these advantages, it is urged that they assume that the dealings are conducted on a rational basis. This is not always the case: speculative dealings and gambling in the shares often play an important part in fixing prices of shares. It may also happen that the public will blindly follow the lead of a group of speculators and will afterwards be left "holding the baby", with the result that there is a dissipation of economic resources. It is argued that such movements are temporary in effect and that, in the long run, prices on the Stock Exchange tend to bear a close relation to their "true" value. However, remedies have been put forward from time to time to reduce the possibility of speculation, and one of the most important of the suggestions is that each transaction shall be partly for cash, and so offset the capacity which stocks and shares possess of being speculated in without being actually bought or sold.

Chapter 7

INTERNATIONAL TRADE AND ITS PRINCIPLES

THE QUESTION

How does International Trade arise? It is said that the same principles underlie Home and International Trade. Discuss this statement.

THE ANSWER

Within any civilized community exchange often takes place between different localities as a result of the geographical localization of the industries of that community. Similarly in the international sphere, trade between different countries takes place as a result of the specialization of activity of those countries. This specialization arises from a number of reasons, among which can be considered:

(1) Climates, with their influence on national products, vary from country to country. Again, other natural influences, including mineral resources, are distributed in unequal proportions between different countries. Thus the desire for cane-sugar, which is produced in sub-tropical countries, leads to an export of that commodity from those countries.

(2) Population is unevenly distributed over the earth's surface, leading to a flow of products from those countries with a surplus production and a relatively small population to those countries of dense population.

(3) The factor of geographical inertia is important. By geographical inertia is meant that advantage which arises to a nation which has been bequeathed a great productive structure including factories, transport

facilities, communications, to say nothing of a traditional reputation for productive skill and ability.

It follows that if an agent of production is relatively abundant in a given country, it will be relatively cheap in that centre, and commodities, the production of which involve a large proportion of that agent, will tend to be produced more cheaply in that country than elsewhere.

In actual practice it is found that commodities are generally produced in more than one country, even where the natural facilities do not seem to be so advantageous. The explanation lies partly in the fact that the distribution of purchasing power and the distribution of population cause the costs of marketing commodities to influence the determination of the locality in which they are produced. Another factor which influences production costs is that some raw materials lose weight and bulk in the process of manufacture, and economies in transport can be achieved by manufacturing commodities near the source of their raw material.

From this it will be seen that, just as in the case of a community, trade arises because of the specialized activities of its members, so international trade arises from the wide range of requirements of the people of the world and that these are satisfied by the more or less specialized activities of different countries.

It would be a mistake when discussing international trade to overlook the necessity for taking into account the economic effect of national boundaries if for no other reason than that labour and capital move less freely between different countries than within a country itself. The movement of labour will be restricted by differences of language, national habit, sentiment, and various social differences. Capital tends to move more freely but is often obstructed by such things as Government restrictions and control. Finally, trade between different countries will be affected by considerations that do not apply in the case of home trade.

Such considerations are differences in weights and measures; the relatively greater differences separating buyer and seller, the differences in currencies, and, finally, differences in law and business procedure.

THE QUESTION

What gains are to be derived from International Trade?

THE ANSWER

Whilst it is readily admitted that there are distinct gains to be derived from the specialization of activity within a country, the existence of gain from international trade is frequently doubted and very often challenged. In fact, there is a general failure to recognize the advantage that might accrue in certain circumstances, e.g. when a country imports goods which it could produce itself equally as well and at no greater cost.

In order to make the position clear, let us consider the following cases.

1. If Great Britain imports raw cotton, tobacco and bananas from the West Indies, and in return exports textile and manufactured goods, there is obviously an *absolute* gain on both sides. Great Britain gets raw materials which she could not get at all, or only at a prohibitive cost, whilst the West Indies obtain products which could not be produced owing to the lack of suitable facilities. The advantages to both these countries by this trading arrangement are only too evident.

2. Now take the case of trade between Denmark and Great Britain. For the sake of argument let us assume that the following is the position:

(*a*) In Great Britain, X units of resources will produce 10 units of manufactured goods *or* 5 units of, for example, bacon.

(*b*) In Denmark, X units of resources will produce 5 units of manufactured goods *or* 10 units of bacon.

The proposition is this, that if trade took place between the two countries, Great Britain specializing in manufactured goods and Denmark in bacon, then $2X$ units of resources in Great Britain will yield 20 units of manufactured goods, whilst $2X$ units of resources in Denmark will yield 20 units of bacon. That is to say, by specialization $4X$ units of resources yield a total of 20 units of manufactured goods *and* 20 units of dairy produce. If this specialization did not take place, then $4X$ units of resources would yield only 15 units of manufactured goods and 15 units of bacon. In this way a distinct gain arises from specialization, but the way in which this gain will be distributed between the two countries will depend on the terms of trade between them. For example, if one unit of manufactured goods could be exchanged for a unit of bacon, then Great Britain might exchange 8 units of manufactured products against 8 units of bacon. The resulting position would be that Great Britain has 12 units of manufactured goods and 8 units of bacon, while Denmark has 8 units of manufactured goods and 12 units of bacon; both countries being better off than they otherwise would have been in the absence of specialization, for there is a definite gain on both sides.

3. It might be argued that the previous example is not quite representative, as Great Britain with its incomparable facilities for dairy farming and bacon production is, in fact, able to produce both manufactured goods and bacon more cheaply than Denmark. It would, however, be agreed that Great Britain has a greater comparative advantage in the production of manufactured goods. Then with a given unit of resources Great Britain could produce either 20 units of manufactured goods or 20 units of bacon. If Great Britain attempted to be self-supporting she might distribute these resources in such a way as to produce 15 units of manufactures and 5 units of bacon. Turn now to the case of Denmark, and for the sake of argument assume

that the same amount of resources (as in Great Britain) can produce either 8 units of manufactured goods *or* 16 units of bacon, and that Denmark as a self-supporting country in fact produces 4 units of manufactured goods and 8 units of bacon. If trade now takes place between the two countries, Great Britain specializing in manufactures and Denmark in bacon, and if the ratio of trade is 3 units of manufactures for 4 units of bacon, then Great Britain would have 17 units of manufactures and 4 units of bacon, thus gaining an extra unit of dairy produce, while Denmark would have 3 units of manufactures and 12 units of bacon (i.e. she has obtained 3 units of manufactures which, if produced with her own resources, would have meant forgoing 6 units of bacon). In this way both countries have gained from the exchange.

We can summarize the above three cases in this way:

1. Each country had an absolute advantage over the other in certain products and trade between them was obviously desirable.
2. In the case of Great Britain fewer resources were required to produce manufactured goods than bacon, while the converse was true of Denmark. It therefore paid each country to specialize and exchange their products.
3. Here Great Britain had an absolute advantage in the production of both manufactures and bacon, but as this advantage is greater in manufactures than in bacon it will pay Great Britain to specialize on manufactured goods and import bacon.

The principle underlying the three cases already discussed is known as the "Doctrine of Comparative Costs" which can be stated in the following terms:

> A country will gain by specializing in the production of those commodities in which the Comparative Cost advantage is greater (or in which the Comparative Cost disadvantage is less), exporting those commodities in exchange for com-

modities in which its Comparative Cost advantage is less (or in which its Comparative Cost disadvantage is greater).

It will be seen, therefore, that the principle which the Doctrine of Comparative Costs expresses provides the fundamental explanation of why foreign trade takes place.

THE QUESTION

State the advantages which can be expected to result from International Trade. Are there any disadvantages?

THE ANSWER

Any discussion of the Doctrine of Comparative Costs must involve a consideration of the advantage that might be expected from International Trade. These advantages can be summarized as follows. In the first place, each country is able to enjoy the consumption of those goods which it cannot produce with its own resources, or only as a result of a prohibitive expenditure of these resources.

Secondly, each country is able to " maximize its return ". That is to say, each country can obtain the maximum return for the minimum expenditure of its resources, including labour power. This only results where each country devotes itself to the production of those goods (and services) in which it has the greatest comparative advantage.

Finally, this territorial specialization will lead to an increase in the productive powers of the world. Goods and services will be produced more cheaply, thus conferring a world-wide benefit.

When we discussed the principle of the division of labour or specialization it was seen that it was not without its attendant disadvantages. Similarly with the form of territorial specialization which forms the foundation of international trade. These disadvantages can be discussed as follows:

In the first place, a country in order to participate in

an international sphere may have to exploit a particular resource possessed by it, certainly to its own advantage, but to the greater advantage of other nations acquiring it. Thus it is suggested that the exploitation of tin in Malaya confers a greater benefit on other nations than Malaya itself receives.

Secondly, the export of commodities in order to obtain a present advantage may involve a sacrifice of future interests. Certain South American countries have tended to exploit to their fullest extent their oil resources for present gain instead of realizing that these resources are not inexhaustible and should be conserved against future requirements.

Thirdly, in the case of highly industrialized countries, with their great concentrations of urban population, specialization for the purpose of international trade has brought a variety of economic and social problems, e.g. housing, public health, industrial unrest, etc., and this raises the question as to whether the non-economic sacrifice has been worth the economic gain.

THE QUESTION

Discuss the restrictions on International Trade.

THE ANSWER

The advantages of international trade only arise in the absence of restrictions on the movement of goods between countries. In actual fact, the absence of restrictive conditions on trade between countries, that is to say, " Free Trade ", has never existed extensively and most countries have from time to time tried to regulate the direction and the volume of foreign trade to their own advantage.

The majority of these restrictive conditions take the form of what is known as " Protection ". Protection generally implies the restriction of imports on a so-called scientific basis and the arguments behind it are put forward as follows. In the sphere of home trade, the practice of the

division of labour sometimes leads to over-specialization and, in the case of international trade, there may be the same result, so that countries may become wholly agricultural or tied down to some form of arduous occupation, while others may become wholly industrial with consequent social evils. It requires, therefore, a form of protection in order to restore the balance and achieve an all-round improvement in social well-being at a small economic cost. Several arguments are advanced in favour of this contention.

1. In the economic and political spheres there will be greater national unity.
2. In the event of war, a balanced economy such as would be developed under protection would ensure supplies of all materials and improve national defence.
3. Infant industries for which the resources of the country are well suited could be nursed until they were able to stand on their own feet in the competitive struggle and dispense with any further help.
4. A protective tariff can be used to prevent exchange dumping, i.e. when, as a result of low value of its currency on the Foreign Exchange Market, a country finds it possible to sell goods cheaply abroad to the detriment of the home-produced article.
5. Discriminatory tariffs can be imposed in order to obtain trade concessions from another country or to obtain a revenue.

A consideration of these arguments shows that they are a combination of non-economic and so-called economic arguments. It is not the purpose of the economist to say that one fiscal policy should be adopted at the expense of another. His function is to indicate the economic consequences of pursuing a particular policy, but it must, in fairness, be stated that the theoretical arguments for protective tariffs are seldom justified by practice. For example, infant industries never develop and so fulfil their

anticipated promise, but always appear to require increased protection. Further, protection always appears to permit of pressure being put upon the Government for the exclusive benefit of vested interests. Finally, the argument that a tariff can be imposed for revenue purposes can be easily shown to be fallacious, for it is evident that if it will be the consumer who will ultimately pay, and that if the tariff is producing a revenue, foreign goods are not being kept out, while, on the other hand, if the tariff succeeds in keeping out foreign goods it cannot produce a revenue.

It is for these reasons that most economists favour Free Trade as the principle to be followed in practice, even though protection may have some value as an emergency measure.

Another form of protection which has found some support is Imperial Preference or Empire Free Trade, which, it is argued, would promote Imperial unity by consolidating the British Empire both economically and politically. It is, therefore, suggested that as the Empire is large enough and sufficiently varied economically to constitute a self-contained unit, by restricting the movement of goods from sources outside the Empire, the production and movement of goods within the Empire would be encouraged. However attractive this suggestion appears at first sight, upon examination there are many difficulties. In the first place, the Empire countries could not supply all the foodstuffs and raw materials required by the constituents. Secondly, there might be a retaliatory grouping of other countries which, politically, might be undesirable. Thirdly, trade between the United Kingdom and the rest of the Empire forms only a small proportion of the trade of the former, and the sacrifice in the form of diminished national welfare would for a time be on the side of the United Kingdom. Finally, the interests of the United Kingdom and the Empire countries are not identical in every case. Thus,

Canada, Australia and South Africa have in recent years developed their own industries, which they naturally desire to retain and develop even further, and in the absence of a change in economic policy on the part of the Dominions it is difficult to see how the scope for preference can be prevented from being gradually restricted.

THE QUESTION

In what way can a distinction be drawn between (a) The Balance of Trade; and (b) The Balance of Payments?

THE ANSWER

Every country periodically publishes a statement based upon the returns of its Customs and Excise Administration, showing the value of its imports and exports. Frequently these figures are so interpreted as to show a favourable or unfavourable balance of trade. The balance of trade of a country is said to be favourable when the value of that country's exports are in excess of its imports over a given period. Conversely, the balance of trade is said to be unfavourable when, over a given period, the value of a country's imports are in excess of the value of its exports. This interpretation is a survival of the " Mercantilist " principle which was current in Europe in the seventeenth and eighteenth centuries, when it was thought that the aim of international trade should be to accumulate gold. This was to be achieved by the maintenance of a " favourable " balance of trade, i.e. an excess of exports over imports. If this were successful, the balance would have to be paid in gold and so enrich the creditor country.

So far from being the case, it must be noted that the so-called adverse balance of trade might in fact indicate conditions of prosperity. In the case of a manufacturing country, a large volume of imports might indicate a heavy purchase of raw materials for its industries, and eventually the suppliers of these raw materials may become

the customers of the manufacturing country with respect to the finished products.

In any event, the published returns of exports and imports do not indicate the real position, as there are many items giving rise to international payments, which are subsequently expressed in the form of exports or imports of goods. These items are described as "invisible exports" and "invisible imports". The nature of these invisible items can be defined in the following terms. "Invisible exports" are those services which do not appear in the records but for which payments have to be made to a country in the form of goods. It will be seen that in their effect on the international movement of goods and services these "invisible" items are similar to exports of tangible goods. "Invisible imports", on the other hand, are the unrecorded services and other items for which a country has to pay in the form of commodities or of bullion, i.e. exports. In the case of Great Britain, the principal invisible exports in return for which there are imports of goods and services, can be discussed under four headings.

1. Shipping Services. In normal times the bulk of the world's products were transported in British ships, and the services of the mercantile marine, when paid for, represented an import of goods.

2. Banking and Insurance Services. London is the chief centre of the world's business in Marine and Fire Insurance and the income from premiums represents in normal times a considerable import. Under this heading must be included incomes earned by the various agencies and institutions of the London Money Market engaged in the financing of international trade.

3. Income from Overseas Investments. This consists of the income from any long-term investments abroad (less, of course, income paid to foreigners on their investments in this country).

4. Receipts from Miscellaneous Sources. This includes such items as expenditure by tourists in this country, film royalties, payments made on account of the sale by Britain of second-hand ships, remittances from emigrants, and the expenditure by foreign Governments on their diplomatic and consular services in this country. It is true that payments of this miscellaneous character are made to other countries, but the Board of Trade estimates show a net advantage in favour of Great Britain.

From this it will be seen that no country can maintain a favourable balance of payments over a long period, as all trade implies reciprocal relations and no country can sell abroad indefinitely and refuse to buy. It follows, therefore, that in the long run the exports and imports of a country must balance each other, but this is not to say that for a short period there may be a disparity between exports and imports. Sooner or later equilibrium tends to be restored, and " a country will import only as much as it can buy with its exports ".

Chapter 8

THE FOREIGN EXCHANGES

THE QUESTION

Explain what is meant by the statement that the " rates of exchange between differences are determined by the relative purchasing power of these currencies ".

THE ANSWER

In the long run all imports are paid for by the exports and conversely, but the necessity of making payments for goods purchased from abroad raises the question of the foreign exchanges.

In order to get a clear idea of the principle underlying the foreign exchanges it is necessary to recognize the fact that every purchase from a foreign country involves a payment to that country in terms of its own currency. To obtain the currency of the foreign country entails the acquisition of a claim in some form or other to the currency of that country. It follows, therefore, that with the constant international movement of goods and services there is a supply and demand for currency on the foreign exchange market.

Before discussing the influences affecting the supply and demand for currency, we must consider the explanation put forward to explain how the Rates of Exchange between two or more currencies are determined. This explanation is known as the Purchasing Power Parity Theory and, in relation to the currencies of countries whose rates of exchange are quite free to vary it, states that :

> "The rate of Exchange tends to rest at the point which expresses equality between the respective purchasing powers of the currencies."

The theory is an old one, but following the last War, the

writings of the Swedish economist, Professor Gustav Cassel, made it popular, and he explained the conception in these words:

> "Our willingness to pay a certain price for foreign money must ultimately and essentially be due to the fact that this money possesses a purchasing power as against commodities and services in that foreign country. On the other hand, when we offer so-and-so much of our own money, we are actually offering a purchasing power as against commodities and services in our own country. Our valuation of a foreign currency in terms of our own, therefore, depends mainly on the relative purchasing power of the two currencies in their respective countries."

It might be possible to apply the theory so as to explain changes in price levels, as has been done by Professor Cassel, but it does not provide,

> "an absolute basis by which we can measure real values of two currencies; if for no other reason than the currencies themselves function in their respective countries as the basis of all values and there is no absolute method of assessing the purchasing power of any currency."

For this reason the theory is criticized on the grounds that it is "largely an abstraction and, therefore, a very dubious guide".

THE QUESTION

What are the influences which determine the fluctuations in the supply and demand for foreign currencies?

THE ANSWER

Short-run fluctuations in the supply of and demand for foreign currencies depend on the following factors:

(1) The monetary policy of a country will have an effect on its supply and demand and would arise in this way. If the policy were inflationary in effect, as we have already seen, prices would rise, and provided prices in other countries

remained the same, this would make it difficult for foreign purchasers to acquire the goods of that country and the demand for the currency of that country would fall; it follows that as a consequence the exchange value of its currency would fall.

(2) Trade Conditions. By this is meant the reciprocal demand for and supply both of goods and services. It has already been seen that the purchase of goods from a foreign country involves a demand for the currency of that country. The position can, perhaps, be better explained in this way. If merchants in Great Britain purchased raw cotton from the U.S.A., then, in order to make the payments to the American cotton producers, the purchasers must obtain claims to American dollars, in effect, by offering sterling on the foreign exchange market; thus dollars are put on demand and sterling in supply. At the same time, however, British manufacturers and exporters abroad will require to be paid in sterling, and in order to acquire it these foreign purchasers will put their own currencies in supply and sterling in demand. The sum total of the supply of and demand for sterling will have an influence on its rate in the foreign exchange market.

(3) There will also be Stock Exchange influences which arise mainly from the purchase and sale of foreign securities. Thus the purchase of American securities by British investors will increase the demand for dollars and increase the supply of sterling, and in this way thereby depress its value. When interest is paid on these securities, the effect on the sterling exchange rate is favourable since the payment increases the demand for sterling in terms of dollars.

(4) Banking influences are also important. They include the investment funds by banks in other countries; the issue of letters of credit and arbitrage operations which can be defined as: "The buying and selling of foreign currencies with the object of making profits out of the differences

existing between the various exchange rates at the same time."

(5) Speculative influences. Over a short period when, owing to political or economic instability, it is feared that the value of one currency will fall in terms of another, there tends to be large movements of funds either for safety or for the purpose of making a profit on the exchange movement. During the relatively abnormal period of 1929–39, the movement of this "refugee money" and speculative money was very potent in its effect on the exchange rates of currencies.

THE QUESTION

What methods are adopted or have been adopted at various times to correct adverse exchange rates?

THE ANSWER

In the long run, the foreign exchange rates tend to correct themselves, but sometimes fluctuations are due to fundamental conditions in the economy of a country, or it may happen that it is desirable to take steps to correct the effect of an adverse rate at once. In such cases, and mainly depending on the causes of the fluctuations, it is possible to adopt one or all of the following methods to bring about a change in the foreign exchange rate of a currency.

(1) Probably the most effective procedure is to increase exports and at the same time endeavour to decrease the volume of imports from abroad. Exports can only be increased by increasing productive efficiency so that costs are lowered and the goods of the country become cheaper to acquire. In the case of imports, the reduction may be effected by placing a prohibition on the importation of certain goods which are regarded as non-essential during the emergency. It will be realized that these steps will take some time before they can be said to produce any effect,

and, therefore, they may have to be reinforced by other means.

(2) The export of gold or foreign currencies on gold-standard countries. Following the declaration of war in 1939, Great Britain was compelled by circumstances to turn her productive resources over to the prosecution of the war and to supplement her own production by purchases from the U.S.A. Owing to the fact that the demand for sterling would be reduced and that the demand for dollars would rise with adverse effects on the sterling-dollar exchange rate, the British Government mobilized gold holdings and holdings of foreign currencies which were used to pay for purchases abroad and assist in the maintenance of the Sterling Exchange rate.

(3) The export of securities. In its effects on the exchange rate this procedure is similar to (2) above. Thus American securities held by British subjects were commandeered and exported to the U.S.A., in order to support the sterling-dollar exchange with the dollar holdings thus created by the sale of those securities. The practice was extended so as to include most securities of foreign countries which were sold in order to obtain claims to dollars. A similar effect could have been achieved by raising a loan in the U.S.A. (were this possible), and thus establish credits in New York in order to maintain the sterling exchange rate.

(4) Where the monetary policy of a country is responsible for the adverse exchange rate, this obviously indicates the remedy to be adopted, namely, the reformation and stabilization of the currency system. This will, generally, be achieved by deflation or devaluation. Deflation implies a reduction in the number of units of money being offered against a volume of goods. Devaluation, on the other hand, means the replacement of the existing currency by a new monetary system so as to achieve stabilization.

(5) Speculative influences can be offered by the operations of an Exchange Equalization Account.

THE QUESTION

What have been the reasons for establishing systems of Exchange Control?

THE ANSWER

Towards the end of the year 1931, when most countries were abandoning the Gold Standard, it became necessary to ensure that the external value of the currencies now off the gold standard were not allowed to fluctuate wildly. Most of these countries adopted some form of mechanism for controlling the exchange rates of their currency. Among the important methods were (1) Exchange Equalization Funds; (2) Exchange Controls; and (3) Clearing Agreements.

Dealing first with Exchange Equalization Funds, a study of the position of Great Britain after the abandonment of the Gold Standard in September 1931 will help to make the matter clear. When it became clear that the steps to be taken to restore the exchange value of sterling were not going to include inflation but that a series of national economies were to be put into operation, speculators and other holders of foreign currency, realizing that sterling was pulling out of its crisis, but that other currencies would still have to meet their crises, began to convert these holdings of foreign currencies into sterling, the value of which began to be forced up to a level not warranted by true economic conditions. In June 1932, the Exchange Equalization Fund began to operate in order to offset the speculative influences and to restrict exchange movements within narrow limits. The resources at its disposal consisted originally of Treasury bills which were sold in the London Money Market to acquire sterling. In the event of the rate rising too rapidly in favour of sterling, the fund exchanged this sterling for the

foreign currency which was being offered for sterling, and in practice, in turn the foreign currency was used to acquire gold. Conversely, should the exchange value of sterling begin to fall, then by releasing some of the gold it bought back sterling, thus forcing up its value. It follows, therefore, that the resources at the disposal of the Exchange Equalization Fund at any time consisted of Treasury bills and holdings of gold, and it may be concluded that the power of the fund to keep the exchange value of sterling down was limited by the extent of its sterling assets, and its power to keep the exchange value of sterling up was limited by the extent of its foreign assets.

Although reference has been made here to British experience the fact must not be overlooked that both the U.S.A. and France also established Exchange Equalization Funds in order to exercise some control over the exchange rates of the dollar and franc respectively.

With regard to Exchange Controls, these have been described as :

> " Instruments for altering, or artificially stabilizing rates of Exchange by influencing *the volume of transactions* carried on across national frontiers, both by affecting their total amount and directing their flow into particular channels."

In general, this involves a " form of rationing of foreign currencies in relation to the purposes for which they are needed ". The purposes for which foreign currencies might be needed are, in order (*a*) to pay for purchases of goods from abroad ; (*b*) to pay interest to holders of securities of the country exercising the control ; (*c*) to enable money to be taken out of the country by tourists going abroad, etc. Control is exercised by compelling all foreign exchange transactions to take place through some central authority under the supervision of the central bank, and imposing heavy penalties on transactions involving foreign exchange

which takes place otherwise than through the control. As there is also prohibition on the export of currency, the effect is that foreigners with accounts in the banks of the country exercising the control find these accounts " blocked ". In other words, the foreigner can only draw upon them to a limited extent for specific purposes. Blocked accounts may also be created as the result of the sale of securities and assets held in the country with controlled exchanges. This blocked money is often used to subsidize exports or services such as are involved in the tourist industry.

Finally, mention must be made of Clearing Agreements which have arisen as a result of the practice of Exchange Control. It is obvious that any of the forms of exchange control can be exercised so as to encourage the importation of certain kinds of goods considered necessary in the national interest and, in addition, to discriminate between different countries so far as trade is concerned. Such discrimination becomes important when it takes the form of a bilateral " Clearing Agreement ". Clearing agreements usually take the form of an arrangement between two countries, say *A* and *B*, under which each agrees to take certain goods of the other. The payments for these goods are formed into a special fund in each country, out of which purchases from the other country were to be met, thus involving a currency clearing arrangement. This method has met with strong objection on the grounds that it tends to emphasize the degree of State interference in spheres in which private enterprise has been hitherto predominant.

Chapter 9

THE TRADE CYCLE

THE QUESTION

What is the Trade Cycle? Discuss some of its characteristics.

THE ANSWER

For several years, economists in their enquiry into the question of why the value of money fluctuated were led to examine also the question of why trade was good at some periods and at other times bad.

It was true that with the advent of industrialization there had been a rapid growth in productive powers. Superimposed on this upward trend in production had been a series of periodical alternations of growing and declining business activity. So regular and uniform in characteristics were these movements that the name of " trade " or " business cycles " was given to them.

They appear to have become manifest in different countries after those countries had turned over to modern methods of production with their accompanying organization of banking, insurance and finance generally. It is found, therefore, that the effects of these movements are more severely felt in those countries constituting highly organized centres of industry and commerce than in those countries the economy of which is based on agriculture. This fact has led to certain fundamental features in modern economic life being identified as having some bearing on those movements.

1. Under modern conditions, the adjustment of economic means to economic ends is undertaken by a specialized class of entrepreneurs whose activities are unified into a system by the influence of competition and self-interest.

2. The production of goods involves the time element in the particular sense that production is initiated in anticipation of demand. In other words, the entrepreneur tends to formulate estimates of market conditions at some time in the future and tries to anticipate them. This question of time is of still greater importance in those industries producing capital goods. In this process of producing both capital and consumers' goods it must not be overlooked that the consumer, as such, has no separate independent existence, for each producer is the consumer of another producer's finished products. The recognition of this fact emphasizes the interdependence of modern industry.

3. Business activity depends greatly on the individual forecasts of future business conditions made by the separate entrepreneurs. The trend of these forecasts will be influenced by the confidence in the general business outlook, and following the fact that all producers are interdependent it will be realized that increased business activity in any particular section of industry will have repercussions on industry as a whole.

4. Finally, the producers of capital goods are affected to a marked degree during periods of boom and depression. This fact can be illustrated in this way : if 1 unit of capital goods produces 10 units of consumers' goods, and, if the demand for consumers' goods is 100, the demand for capital goods will be 10. But a characteristic of capital goods is that the annual production is relatively small to the stock in existence. Let us further assume that the 10 units of capital goods is made up of 9 units in use and 1 unit which is annually produced by the heavy industries by way of replacement. Now, should the demand for consumers' goods be now represented by the figure 110 units, then 11 units of capital goods will now be required. If, as was formerly stated, the annual production of capital goods is

1 unit and now an additional unit is required, the result is that an increased demand of 10% in consumers' goods has brought about an increase of 100% in the demand for capital goods. This illustration is not intended in any way to be arithmetically accurate in the sense that the ratio between capital goods and consumers' goods represents actual fact, but it will serve to illustrate the principle involved.

THE QUESTION

It is sometimes said that cyclical movements in trade are due to the operations of certain initiating causes. Discuss some of these causes.

THE ANSWER

Most explanations of the Trade Cycle fall into one of two groups, namely:

(1) Those which lay stress on the effect on certain initiating causes;

(2) Those which attempt to explain the course and the reasons for this course taken by the Trade Cycle after a movement has once been initiated.

In this question we are concerned with the examination of the initiating causes which can be made as follows:

(*a*) GOOD OR BAD HARVESTS. With this explanation can be associated Jevons's "Sunspot Theory". Jevons made the first modern attempt to explain the reasons for the movements in trade. His argument, briefly, was that the periodical sunspots affected the climate which, in turn, affected the harvests and so brought about changes in the purchasing power of the community and that this threw the economic machine out of gear. In relation to this explanation it is possible to say that the co-relation between the suggested cause and the subsequent effect is not conclusive enough to provide a complete solution. At the same time, it must not be overlooked that in the past, particularly in the U.S.A., harvests and trade cycles have tended to correspond.

(*b*) INVENTIONS. It is suggested that certain fundamental inventions revolutionize productive methods in industry, or certain parts of it, and this accelerates business activity. Another possible effect of new inventions is that they cause changes in effective demand which, in turn, accelerate the creation of opportunities for profitable investment. In support of this theory it is suggested that, as an example, there was the boom of 1840 which coincided with the railway development of that period. Two objections to this explanation are that new inventions and innovations do not appear *en masse* at regular intervals of time, and that most inventions require a background of active trade in which they can be introduced and developed. The appearance of inventions can be considered as a consequence and not a cause of good trade.

(*c*) INDUSTRIAL DISPUTES. In connection with these, the explanation is put forward that a period of active trade coincides with a period of industrial peace. This is due, it is suggested, to the fact that business men are more likely to undertake long-term obligations if they have an assurance that their costs are not likely to fluctuate adversely to their estimates, and industrial peace will assure the entrepreneur of part of these costs. It is argued, however, that disputes are the consequences of trade movements rather than the cause. During an upward movement when prices are rising more rapidly than costs, unusually high profits are made by the entrepreneur, and this makes him more willing to concede to wage demands. There is, therefore, no disruption in the relations between the employer and his employees. Conversely, during a downward movement prices tend to fall more rapidly than costs and attempts to lower these costs by reducing wages are resisted strongly and industrial disputes result.

(*d*) PSYCHOLOGICAL CAUSES. The explanation here is that optimism and pessimism are to be regarded as causal

factors which tend to induce or to intensify the upward movement in trade or the depressed conditions which usually follow a boom. Both optimism and pessimism are supposed to operate through their effects on the amount of investment. In criticism it may be said that neither optimism nor pessimism can be identified as distinct from many other factors such as low interest rates, the appearance of new investment opportunities which emerge as a result of new inventions, changes in demand, and so on. Can it then be agreed that at a given period of time by " thinking prosperity there will be prosperity " ?

THE QUESTION

Give an account of the more important explanations offered by economists of the periodical variation in the industrial activity of a country.

THE ANSWER

There are many explanations of the complex economic phenomenon known as the Trade or Business Cycle. This is due largely to the fact that such a movement affects all parts of the economic system and there is room, therefore for a " multitude of different explanations which need not all be logically exclusive and contradictory ".

In fact, the majority of economists have refused to agree that the causes of the business cycle can be explained in terms of one factor, and those which do so are rightly regarded doubtfully. Most theorists point to a whole set of relevant factors, one of which, however, is sometimes considered by them to be " dominant ". It is for this reason that three groups of explanations or theories are important. Thus we have :

1. THE PURELY MONETARY THEORY. This theory has been developed mainly by Mr. R. G. Hawtrey, for whom the trade cycle is purely " a monetary phenomenon " in the

sense that changes in " the flow of money are the sole and sufficient cause of changes in economic activity ". When the demand for goods in terms of money increases, trade activity increases, production increases and prices rise. When activity " falls off, trade slackens, production shrinks and prices sag ". Mr. Hawtrey starts with the assumption that purchases are made mainly with money which is borrowed from the banks, i.e. bank credit, to which legal tender money is only subsidiary. Bank credit is demanded in order to acquire goods for re-sale, and this will have the effect of reinforcing the upward movement in prices. Rising prices in turn will have the effect of justifying the borrowing. It is the banking system which creates this credit and regulates its quantity, and, therefore, these purchases dependent upon borrowed money will be regulated by the extent to which the banks are ready to grant loans at comparatively low rates of interest. The general level of prices will not be affected by the increased volume of purchasing power if the production of goods is increased so as to keep pace with it, and so maintain the ratio between the amount of money and goods.

Obviously there is a technical limit to the expansion of production, but as the cumulative process of the expansion of production reaches a limit, higher prices will be charged to consumers who will have, therefore, a further inducement to borrow. Another factor which encourages expansion in business activity is the increase in the velocity of circulation.

The turning-point in this process comes about when the ratio between cash reserves and deposits is upset. This occurs as a result of two factors.

(*a*) Cash (legal tender money), which is predominantly used for making payments of wages and in small retail transactions, is depleted in this way. As it passes into circulation from the holdings of the banks

in the form of wages (which will increase), an increasing amount will be held as a cash balance.

(*b*) The expansion of credit due to causes already mentioned.

There comes a time when the central bank, in order to maintain exchange stability, refuses accommodation of cash to the joint stock banks, and thus in order to replenish cash reserves, the latter are compelled, not only to check credit expansion, but actually to contract it by charging higher rates of interest. The downward movement is cumulative in its effects because production already undertaken will result in more goods coming on to the market. The smaller amount of purchasing power available in relation to these goods will cause prices to fall. All the factors which tended to stimulate the upward movement now work in the opposite direction and tend to accentuate the effects of a slump.

This explanation of the Business Cycle has been criticized on the grounds that the real causes of the fluctuations in trade are the fundamental conditions of industry, and that the expansion of currency and credit cannot cause an upward movement followed by depression, but will only make these movements possible and determine their extent. Nevertheless, it has to be admitted that the monetary theory does explain why prices rise, notwithstanding an increased volume of production, and also gives valid reasons for the generality of the movements.

2. THE UNDER-CONSUMPTION THEORIES. These theories have a long history, but have been re-stated by several prominent modern economists. On the whole, their scientific standard is relatively low and they are to be regarded not as clear-cut concepts, but as covering a wide variety of phenomena. However, in its simplest form, as put forward by the English economist, Mr. J. A. Hobson, the theory can also be taken to mean over-saving in the

following way. The proportion between production and consumption is upset as a result of the savings by individuals and corporations. The cause of over-saving is the fact that the national income of the community is distributed between the few and the many, the few being represented by institutions such as joint stock concerns, banks and other financial institutions, and it is the latter who are responsible for most of the saving in the community. The activity of saving may exert an adverse influence on the economic situation in these ways:

(*a*) On the one hand, savings lead to a fall in the demand for consumers' goods because the money saved is not spent on consumption; and

(*b*) On the other hand, savings are, as a rule, invested productively, the sums saved being used to add to the capital equipment of a community.

Thus we have two things working to the same end, namely, the demand for consumers' goods is reduced by the process of saving, which, at the same time by being used productively tends to increase the volume of consumers' goods. The increased supply relative to demand causes prices to fall: this is because the amount of consumers' goods is disproportionate to the amount of effective purchasing power.

The fall in prices will tend to discourage saving in the form of investment, and this process will continue until the equilibrium between the productive machine and the consumers' market is restored and an incentive given to saving which will disrupt the equilibrium again.

The theory on the whole, as a complete explanation, has been subjected to criticism, but its value lies in the emphasis placed on the necessity for maintaining a fairly strict proportionality between saving and consumption.

3. Finally, we have to discuss a number of theories which, for want of a better term, can be described as "error

theories" of the business cycle. Their importance lies in the fact that they have been stated in one form or another by several prominent economists, including Sir William Beveridge (*Unemployment*, 1930) in order to explain the nature of the causes of general unemployment.

Generally speaking, the theories start with the fundamental assumptions that:

(1) Business is organized and carried on primarily for the purpose of gaining a profit; and

(2) That the complex economic structure consists of a large number of interdependent producing units.

It is further suggested that each business cycle is divided into three distinct phases: (*a*) the upward movement; (*b*) the period of apprehension; and (*c*) the downward movement.

To deal with these three phases in turn:

(*a*) At the beginning of an upward movement, all the inefficient factors in the productive process have been eliminated. The upward swing itself may have been initiated by one or many causes, but whatever the cause, it will be strengthened in its effect by the knowledge of business men that no depression has lasted for ever. If there is only slight encouragement, producers will regard the time as opportune for some expansion of business (even if only repairs or renewals are undertaken) as prices are at their lowest. The effect of this slight optimism will be felt generally, and there will be, ultimately, an expansion in the volume of business activity. This expansion will arise from these factors:

(i) Business men will place orders with each other based on promises to pay as banks will increase the volume of their loans. People will turn over money more rapidly and prices will rise more quickly than costs.

(ii) By increasing the willingness to assume the responsi-

bility of producing in anticipation of demand the current volume of output is increased.

(iii) As a result of the increased volume of effective purchasing power, there is an increased demand and, as costs are at their lowest, the profitability of business enterprise is both confirmed and emphasized.

To turn to the next phase:

(*b*) The period of apprehension, which is the name given to that period in the business cycle which marks the separation of the culminating phase in business activity and the following period of depression. It will be realized that, sooner or later, the disturbance which will be set up in the ratio of cash reserves to deposits arising from the demand for loans, must lead the banks to the position where they are compelled to contract the amount of credit. Further, as production continues to be expanded, costs must increase and encroach on the margin of business profits. These increased costs will be due to increased wages, higher interest rates and higher labour costs, as less efficient labour will have to be employed—either in the form of less skilled or less well-trained workpeople—or by working existing skilled workpeople hours beyond the optimum. The combined results of all these tendencies will be that capital will be unable to continue to earn a high return, and thus its realized yield will fall short of anticipation. This will have the effect of lessening confidence in the business outlook and so induce a dampening down of business activity. This, in turn, leads to the next phase, namely:

(*c*) The downward movement, sometimes described as the "slump" or "depression". This is a period of decreasing business activity, and to the set of influences already mentioned must be added the imperfect operation of the monetary system. When business confidence passes to apprehension, business men generally endeavour to fortify their financial position by increasing the reserves of

money which they usually hold against unforeseen contingencies. The holding of this money will reduce the quantity in active circulation and also that which is available for the purchase and consumption of goods. Again, the disparity between deposits and cash reserves causes the banks to adopt a cautious loan policy, but against this must be noted the influence of the lower yield of capital which will discourage the investor and borrowing for the purpose of investment. Thus, failing confidence in the business outlook will set up the following train of events. The judgment of entrepreneurs will be prejudiced and productive output unduly discouraged, and, as a result of the interdependence of business units demand will slacken off, and prices will fall. This decline in prices will be emphasized by the lack of confidence on the part of the entrepreneurs and the downward movement will, therefore, be further reinforced until conditions develop which will be favourable to another upward movement, and so on.

THE QUESTION

What proposals can be suggested for the mitigation or abolition of the fluctuations of the trade cycle?

THE ANSWER

The general economic instability which arises as a consequence of the fluctuations in activity and which have been described as the business or trade cycle, has engaged the attention of economists and sociologists. These have pointed out the grave social effects which these fluctuations produce by reason of their influence on the volume of employment; movements which concern in a vital manner the welfare of the working class, numerically the most important class in any community. They suggest that the real purpose in studying the relevant phenomena is in order to advance proposals to eliminate the worst effects of these

fluctuations or to eliminate the business cycles altogether by removing their causes.

It is evident that in considering the various proposals designed to have a remedial effect, these proposals are for the most part determined by the various theories of the cycle which have been put forward.

In the case of the monetary theories in which the actions of the banks are regarded as the dominant cause, the remedy will lie in the hands of the banks who, if coerced by some external authority, by loaning less freely at the beginning of an upward movement could do much to prevent it occurring. Conversely, recovery from a depression could be more easily effected if the banks charged lower rates for their loans. Mention has been made of the possibility of the coercive action of an external authority, and in this connection it is proposed that the Central Bank (as the final arbiter, in the national interest, of the credit policy of the banks as the principal lenders of funds) should exercise a more potent influence.

With the under-consumption theories, the remedies proposed take on the character of a more fundamental nature. It has been noted that the under-consumption theories stress as the real cause of the business fluctuations the disparity which exists at certain times and under certain conditions between the proportion of the national income which is devoted to saving and the amount used for acquiring consumers' goods. This disparity, resulting in over-saving, it has been explained, is principally due to unequal distribution of income which permits of too large a proportion being retained in the hands of a few persons or institutions, and it is these who are responsible for the bulk of the saving within a community. It follows that the proposed remedy is the raising of the wage-level and a more equitable distribution of the national income by increased taxation. In this event, the proportion of savings would no longer be

a danger, for increased consumption could be increased proportionally with ever-increasing production.

Finally, in the case of what have been described as the "error" theories of the business cycle, in which the causes of the fluctuations in business activity are ascribed to the optimism or pessimism of business men who are thereby induced to make inaccurate forecasts of the future demand for their products, the interdependence of all business units makes the effects of these forecasts much wider and more fundamental than they otherwise would be.

The remedy proposed follows the line that the business man must be made aware, among other things, by business forecasting of the business position at each stage, and educated to take the steps necessary to prevent that particular stage from developing further. In this, it is proposed that the State, the municipalities, various public and semi-public bodies, e.g. Chambers of Commerce, and the banks must play responsible parts.

Finally, the danger must be avoided of regarding each theory as an explanation of the sole cause of the business cycle. Generally speaking, a whole set of factors, in varying combinations, are responsible for business fluctuations, and the more accepted view is that:

> "The difference between various theorists is rather a difference in the *emphasis* laid upon the different factors than a difference in the enumeration of contributing causes and conditions."

It is to be concluded, therefore, that the remedies discussed in the foregoing paragraphs are only applicable when the cause to which they are related happens to be, in the given set of conditions, capable of being recognized as the principal causes, which would not exclude the collateral operation of other remedial measures.

Chapter 10

THE STATE AND ECONOMIC ACTIVITY

THE QUESTION

As compared with laissez-faire, how can Government interference in various phases of economic activity be justified?

THE ANSWER

In dealing with this question, it will be best to get a clear idea as to what is really implied by the term *laissez-faire*. The underlying principle is very old, much older than the Physiocrats to whom the original statement of the principle is frequently ascribed. The theory assumed a natural harmony between the ultimate social and the private interests. The doctrine was developed into system by what is known as the Manchester School and used to justify industrial and social conduct which was later to be regarded as intolerable. The doctrine of *laissez-faire* may be more completely expressed in the following quotation:

> " Wealth may be most rapidly accumulated and most fairly distributed; that is to say, that human well-being may be most effectually promoted, by the simple process of leaving people to themselves; in other words, leaving individuals to follow the promptings of self-interest, unrestrained either by the State or by public opinion, so long as they abstain from force and fraud."

At this juncture it may be wise to point out that " The maxim of *laissez-faire* has no scientific basis whatever, but is at best a mere handy rule of practice." This has for the last half-century been the view of all the leading economists.

Any form of national economy postulates, among other things, the existence of some authority for the maintenance of law and order, i.e. for some authority to intervene in the

conduct of individuals, wherever this might be necessary in the interests of the State as a whole. With every advance of society and as its organization has become more complicated, the duties of the Government as the intervening authority have increased, and in some cases it has taken over and performed services which formerly lay within the spheres of private activity. Thus the State now performs services which can be considered as follows:

1. It provides services which could not be provided in the circumstances by private enterprise, and, be it noted, can provide them more efficiently than could private enterprise. Under this heading we have the provision of national highways, public health, postal services, police force, national defence forces, etc.
2. Closely allied to the preceding group of services are the social services which are in most countries provided by the State. Examples of these services are the old-age pensions, National Health Insurance, education, and, in the realm of industrial relations, the provision of conciliation and arbitration machinery.

In justifying these forms of State activity exercised through governmental machinery, it will be realized that the increasing degree of intervention along these lines confers benefits upon every member in the community. For example, in the case of public health the benefits to each individual of the machinery of inspection and remedy are indivisible. In this way, the interference of the State can be justified on the grounds that only through the State machinery can such necessary services be efficiently performed.

THE QUESTION

From what sources can the State derive its income?

THE ANSWER

As society advances and becomes more complicated the

duties of the Government tend to increase. This increase of duties involves an increase in government expenditure which must be met by increased income in the form of revenue. Revenue can be raised in the following ways:

1. *From State-owned Property.* The property owned has, in the past, yielded a substantial revenue, but this source has declined in importance in more recent years so that the income derived from it, when compared with other sources, is almost insignificant.

2. *By the Ownership of Commercial and Industrial Undertakings.* The profits from such undertakings as the General Post Office with its ramifications such as telephone services, wireless and cable communication, broadcasting, etc., make valuable contributions to the State income.

3. *Taxation.* In most modern States, this is by far the most important method of raising revenue. It has given rise to serious inquiry as to the principles upon which the system of taxation is or should be based.

4. *Loans.* During times of emergency, exceptional expenditure has to be met by recourse to exceptional methods of obtaining revenue. The most important of the methods adopted in such circumstances is by raising loans which may be either temporary as in the case of Treasury bills and loans from the Bank of England in the form of "Ways and Means Advances", or permanent as in the case of War Loans, etc.

5. *Inflation.* The emphasis on the aspect of inflation as a form of taxation was made during the years following the war of 1914–18, and Lord Keynes then described it as an "insidious form of taxation". The reasons in favour of this description can be argued as follows. The effect of all forms of taxation is to reduce the amount of purchasing power in the hands of the individual consumer and transfer it to the Government; when, therefore, a policy of inflation is adopted by any Government, it takes the form of issues of

inconvertible paper money the purchasing power of which is in advance of the rising price-level. As prices rise in response to the issue of this money, the purchasing power of that held by the public is reduced correspondingly. As the Government is responsible for the policy it is also the gainer by such transactions. The term "forced saving" is applied to the fact that people with relatively fixed incomes are compelled by the rising prices to reduce their consumption.

THE QUESTION

What is taxation? Discuss the principles upon which it should be based.

THE ANSWER

Taxation has been defined as "A compulsory exaction by the State of part of the wealth of individuals for public purposes".

All taxation, therefore, has the effect of diminishing the purchasing power in the hands of the individual consumer, and to this extent he or she is worse off. The extent of this loss will vary from individual to individual and will be determined according to the operation of the Law of Diminishing Utility. In some states, and at various periods, the burden of taxation has been such that the expenditure on necessary food by the wage-earning class of the population has been reduced. This has resulted in a lowering of productive efficiency and consequently a reduction of national income.

The policy of the State, as interpreted by the Government, in relation to taxation is guided by certain principles, some of which were first put forward in their modern form by Adam Smith. These principles are:

1. *Equality*. "The subjects of every State ought to contribute towards the support of the government, as nearly as possible according to their respective abilities; that is, in proportion to the revenue which they

respectively enjoy under the protection of the State."

2. *Certainty.* "The tax which each individual is bound to pay, ought to be certain and not arbitrary. The time of payment, the manner of payment, the quantity to be paid, ought all to be clear and plain to the contributor, and to every other person."
3. *Convenience.* "Every tax ought to be levied at the time, or in the manner, in which it is most likely to be convenient for the contributor to pay it. Taxes upon such consumable goods as are articles of luxury, are all finally paid by the consumer . . . it must be his own fault, if he suffers any considerable inconvenience from such taxes."
4. *Economy.* "Every tax ought to be so contributed, as both to take out and to keep out of the pockets of the people as little as possible over and above what it brings into the public treasury, in the following ways. First, the levying of it may require a great number of officers. . . . Secondly, it may obstruct the industry of the people. . . . Thirdly, there are forfeitures and penalties. . . . Fourthly, it may expose them to much unnecessary trouble, vexation and oppression."

In addition to these principles enunciated by Adam Smith, modern writers on the subject have put forward additional principles, namely:

5. *Productivity.* The principle expressed by the term "productivity" is that the revenue which the imposition of a tax produces should justify its adoption by the Government.
6. *Elasticity.* The system of taxation ultimately adopted must be such as to include some taxes which must permit of a certain increase in yield, should any set of conditions necessitate such an addition.
7. *Simplicity.* This is the principle suggested by Mr.

G. Armitage-Smith in his *Principles and Methods of Taxation*, namely, that a system of taxation should be simple, plain, and intelligible to the common understanding.

THE QUESTION

What practical problems must be considered in relation to taxation?

THE ANSWER

Taxation must, from the point of view of the individual, be regarded as a burden, and the main practical consideration is the manner in which this burden should be distributed between the citizens of the State. Regarding this problem in the light of the principle of equity, it is evident that the best method of achieving an equitable distribution of the burden is to contrive a system so that each member of the society is called upon to pay according to ability. This becomes important in communities in which there is considerable inequality of incomes.

The practical problems are, however, " What is ability to pay ? " and " By what systems can equality of sacrifice be achieved ? " In answer to these questions various schemes of taxation have been put forward at different periods. At one time it was thought that equity would be achieved by adopting the principle of " proportionality " as the basis of taxation on the grounds that taxable ability increased in proportion to income and, therefore, taxation which was proportionate to income would result in equality of sacrifice. It has already been shown that there is no economic basis for this contention as, owing to the operation of the Law of Diminishing Marginal Utility, a deduction of 10% from the income of a person who earns £200 per annum (i.e. £20) will, other things being equal, involve a far greater sacrifice of well-being than 10% deducted from the income of a person who earns £2,000 per annum (£200).

The recognition of this economic law in its relation to income has led to the adoption of the system of taxation based on the principle of progression. This means that in order to achieve equality of burden, taxation must be imposed in such a way that as incomes increase in amount, the amount paid in the form of taxation must increase progressively. In this way, the people with large incomes bear the heavier share of the national burden of taxation.

Another matter which is of great importance in connection with any system of taxation is the question of *incidence*. Thus some taxes are intended to be borne by the person taxed while others are intended to be shifted. The reason for the great attention to this matter is that frequently the Government finds that the real burden falls upon classes of persons quite different from those for whom it was intended, or it may be found that the economic results are quite different from those anticipated. For example, a few years ago, the beer tax, the incidence of which was intended to be shifted to the consumer, so reduced the amount consumed, that the brewers suffered from greatly reduced profits ; plant was closed down and the volume of unemployment increased. In this way the *real* burden of the tax was borne mainly by classes other than the consumer.

It is for these reasons that, whatever the theories of taxation put forward, they are limited by the following considerations. In the first place, it is obvious that taxation must be directly connected with taxable capacity. Secondly, as applied to individuals, after the imposition of the tax those individuals should not have a standard of living which is appreciably lower than that which formerly existed. Thirdly, some degree of progression must form part of the scheme of taxation. Finally, whatever the degree of progression introduced, it must not be such as will leave a man's income actually reduced by the receipt of an addition to his income.

There remains a further point to be considered, namely, the case of those persons whose incomes are so low that no contribution from them in the form of direct taxation can be expected. The principle adopted in order to overcome this position is that of indirect taxation. Historically, this form of taxation is very old, and, from very earliest times, impositions have been levied on goods or services so that taxes have been paid by the consumer in proportion to the extent of his consumption. In modern states, this method of passing the cost of tax on to the ultimate consumer is very widespread; in fact, as it merely increases the cost of articles by the amount of the tax, it has the advantages of being unobtrusive and, therefore, encounters less opposition in general, than is the case with direct taxes. By imposing taxes on a wide range of goods and services there is the certainty that all classes within the community bear some part of the burden of taxation.

There is always, however, one important danger with indirect taxation, namely, the principle of elasticity of demand must be considered. If too high a tax is imposed on a commodity so that its price becomes greatly increased, the effect may be that the demand will fall off to such an extent that the taxation does not yield sufficient to make its anticipated contribution to revenue. Generally speaking, few taxes are imposed upon goods which are prime necessities, but rather are they imposed upon what, for want of a better term, can be described as popular luxuries, e.g. beer, wines, spirits, tobacco, motor-cars, entertainment. It will be realized that there is one important advantage from this method of raising revenue. We have already seen that our wants are never satisfied, and as we progress in the economic sense we are constantly adding to the sum total of our wants, so that the luxury of yesterday becomes the commonplace necessity of to-day. In this way, should the occasion arise, additional revenue can be obtained by tapping new

sources, and, in addition, by slight modifications in existing taxes.

Indirect taxation is not without its attendant criticisms which are derived from its inherent disadvantages. The very fact of their unobtrusive nature allays interest in the whole question of the national finances which should be the paramount concern of every citizen. Secondly, it is argued, that the collection of taxes on commodities is more difficult and expensive than in the case of direct taxation. Finally, indirect taxation is a great inconvenience to trade in general and, particularly in the case of a new tax, the disturbance of both price and demand imposes an initial strain upon trade and industry until the latter adjusts itself to the new conditions.

In conclusion, it must be realized that whatever the nature of the taxes, their efficacy from the point of view of revenue will be limited by the practical considerations of administration. In other words, the tax must be such that the revenue it yields must not be swallowed up by the costs of collecting it. It is this fact which prevents what may otherwise appear to be attractive sources of revenue from being utilized. In the case of the United Kingdom, the difficulty is, to a great extent, overcome by " stopping the tax at the source ", as in the case of dividends on stocks and shares. The development and extended application of this principle is largely responsible for the administrative efficiency with which taxes are collected in this country.

THE QUESTION

What is the Diffusion Theory in relation to Taxation?

THE ANSWER

Arising out of a consideration of the question of the incidence of taxation, it was observed that taxes tended to be distributed and shifted over society as a whole. This gave rise to the conclusion that:

> "All taxes, no matter how imposed, are ultimately spread equitably over society by a process of accommodation, which is accomplished through the action of competition, and that the burden of taxation is thus fairly distributed by a portion being passed on until the tax is diffused over the whole community in proportion to ability to pay."

Thus each individual who pays taxes may shift them to the ultimate consumer (known as "forward shifting") or, when it has affected a previous agent of production, as in cases where a consumer reduces his demand for a commodity because it costs him more by reason of the tax ("backward shifting").

Thus, according to the Diffusion Theory, the burden of taxation is distributed in such a way that ultimately each member of society contributes to the revenue in proportion to his or her ability to pay.

At first sight, the theory appears to express a substantial element of truth, but closer examination reveals that the application of the theory is very limited. In the first place, certain taxes are expressly designed for the purpose of placing the burden on certain classes of the community, e.g. the road tax on motorists, a substantial number of whom use their cars merely for pleasure, and who would be, therefore, unable to shift the burden.

Again, the burden of most direct taxes, e.g. estate duties, income tax, stamp duties, etc., have to be borne by the actual payers of the tax, and there is little or no diffusion. This is supported by the fact that all proposals for new taxes have to meet opposition from the sections of the community who will be the sufferers because the burden cannot be shifted.

Finally, it will be appreciated that finance ministers, Treasury officials, etc., go to immense trouble to ensure an equitable system of taxation, and it follows that if taxes were diffused equally, this thought and energy would be so much wasted labour.

THE QUESTION

" Wars can be financed only by present sacrifices and from present resources." Is there any way in which the burden can be thrown on to the future?

THE ANSWER

It is the guiding principle in all questions relating to public finance that current expenditure should be met out of current income. It is not always easy, even in normal times, to adhere to this principle strictly, and in time of war it becomes impossible to observe it.

During time of war there is heavy expenditure along lines, many of which are the reverse of productive, and, therefore, do little to increase the productive powers of the community as a whole. In this category must be placed expenditure on armaments of all kinds. Such extraordinary expenditure cannot be met entirely out of taxation, for there is clearly a limit to which taxation can be imposed upon a community without it having serious repercussions on the economic fabric of society. With an excessive burden of taxation, business enterprise tends to be restricted, and so far as the individual wage-earner is concerned, there will be a reduction in productivity and efficiency. Generally speaking, saving from most sources will be discouraged so that capital is not accumulated sufficiently to meet the needs of a community which is still developing in the economic sense.

For these, and other reasons, during the time of an emergency, extraordinary expenditure is financed from revenue derived from sources other than those of taxation, such as loans, inflation, etc. For the purpose of this question, we need only consider the effect of long-period loans. In the first place, such loans permit the sacrifices incurred in this kind of expenditure to be distributed over a long period and so ease the burden from the shoulders of the present generations. Thus expenditure which is

deemed to be undertaken for the national good should be regarded from the long view, and the existing generations should not be expected to suffer both the misery of a war and to be sole bearers of its financial burdens as well. It is argued, with some truth, that a war undertaken in defence of national institutions must be expected to benefit future generations, and this being so, it is only just that they should contribute some part of the cost in the form of interest and repayment of capital.

Against this, it is urged that it is manifestly inequitable that a burden of debt should be imposed on future generations, especially as these generations have had no voice in determining the policy as a result of which the expenditure was incurred. Future generations will have their own economic problems to face, and they should be in a position to meet such problems without a legacy of debt from previous generations.

To conclude: for the reasons already discussed, wars have in the past been financed by increasing the burden of taxation and by temporary and long-period loans. The latter may be raised externally, i.e. in countries abroad, or internally, i.e. within the country itself. Internal loans may be voluntary in the sense that people are free to choose whether they contribute or not.

On the other hand, they may be "forced" in the sense that in the case of a country possessing a system of inconvertible paper money, inflation reduces the purchasing power in the hands of persons with fixed incomes and transfers it to the Government. Whatever form the loan takes it has the effect of "throwing part of the burden on to future generations who share in the sacrifice involved".

APPENDIX I

BOOKS RECOMMENDED FOR FURTHER READING

Benham, F. *Economics* (Pitman).
Briggs and Jordan. *Textbook of Economics* (University Tutorial Press).
Crowther, G. *An Outline of Money* (A. & C. Black).
Dearle, N. B. *Economics* (Longmans).
Meyers, Albert L. *Elements of Modern Economics* (Prentice-Hall Inc., New York).
Thomas, S. E. *Elements of Economics* (Gregg Publishing Co., Ltd.).

The following books in the Cambridge Economic Series published by Nisbet, deal with special aspects of Economics :

Dobbs, M. *Wages.*
Henderson, H. *Supply and Demand.*
Robertson, D. H. *The Control of Industry.*
Money.
Robinson, E. A. G. *The Structure of Competitive Industry.*
Monopoly.
Robinson, M. E. *Public Finance.*

The following books are specially recommended for more advanced reading :

Boulding, Kenneth E. *Economic Analysis* (Harper & Brothers, London and New York).
Haberler, G. von. *Prosperity and Depression* (League of Nations, 1940).

APPENDIX II

QUESTIONS

Chapter 1

1. Is there any relationship between Economics and Economy ? Discuss.
2. The subject of Economics can be summed up by the three words, " Wants—Activity—Satisfaction ". How far do you think these express the substance of Economics ?
3. Explain the exact nature of the so-called Economic Laws and show in what way they differ from the laws passed by Parliament.
4. A friend asks you to explain what " Economics is all about ". How would you answer the question ?
5. Discuss the implications of the following definition, " Economics is the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses."

Chapter 2

1. " Economics is the science of human wants." Discuss.
2. What are the characteristics of human wants and to what extent is use made of these characteristics in explaining certain aspects of economic theory ?
3. Explain the importance of the concept of Marginal Utility in Economics.
4. Distinguish as clearly as you can between (*a*) Total, and (*b*) Marginal Utility.
5. What is meant by (*a*) Elastic Demand, and (*b*) Inelastic Demand ? Discuss carefully the conditions which determine whether the demand for a commodity is elastic or inelastic.
6. Explain as carefully as you can the conditions which determine the amount of a commodity which will be purchased in the short period.

7. "Price is determined by the conditions of supply and demand." "Both the amounts supplied and the amounts of a commodity demanded will be determined by Price." Can these two statements be reconciled?
8. What factors must a monopoly producer take into consideration in fixing the price of his products?
9. How are the prices of (*a*) Wool and Mutton; (*b*) Flour and Bread; (*c*) Tea and Coffee; and (*d*) Coal and Iron Ore, related?
10. If a tax is imposed upon a commodity, what effects would you expect to follow as a result?

Chapter 3

1. Explain what you understand by the term "Agents of Production".
2. To what extent do you consider the principle of the Division of Labour an integral part of the present economic system?
3. What precise meaning is attached to the term "Land" in Economics?
4. Explain carefully the significance of the Law of Diminishing Returns in Economics. Does this law apply only to land?
5. What is "Labour" in the economic sense? What conditions affect the supply of labour?
6. Explain carefully the modern theory of population and compare it with any former theory of which you have knowledge.
7. "In the modern economic state, Capital takes many forms." Explain this statement and show how Capital is accumulated and what functions it performs.
8. Discuss critically what is meant by the Entrepreneurial Function in the modern state.
9. "Sole Trader; Partnership; Joint Stock Companies; and Monopoly Combinations have been the stages in the development of entrepreneurial activity." Discuss.
10. "Within the same industry we may find many businesses of different sizes and in different stages of development." Discuss this statement by reference to the "optimum" firm.

Chapter 4

1. What is meant by Economic Rent ? Is it the same thing as the popular conception of the term " Rent " ?
2. Explain carefully the Marginal Productivity Theory of Wages.
3. How would you account for the differences in the wages of (*a*) Coal-Miners ; (*b*) Doctors : and (*c*) Women Shorthand-Typists ?
4. What effects have Trade Unions on Wages ? Are there any limits to the extent to which they can influence the wages paid to their members.
5. Write a short essay on the subject of a National Minimum Wage.
6. What is the nature of Interest ? How is it determined ?
7. " There can be no doubt that Profit is society's reward to the Entrepreneur for performing the function of bearing risks." Discuss.
8. " Profit is not a cost of production but a reward for producing." Explain.
9. What is profit ? Who receives it and why ?

Chapter 5

1. " Without Money, modern society could not exist." Discuss this statement and explain the functions performed by money in modern society.
2. What qualities must a commodity possess in order to enable it to serve as a monetary medium ?
3. Explain carefully the Gold Standard and its implications.
4. Write short notes on (*a*) Inflation ; (*b*) Deflation ; and (*c*) Devaluation.
5. " The value of money is a function of its purchasing power." Discuss this statement in relation to the Quantity Theory of Money.

Chapter 6

1. Give a concise account of the institutions which form the London Money Market.
2. "Credit is confidence." Discuss.
3. What are the functions of the Central Bank? Discuss by reference to the Bank of England.
4. Write a short account of the functions of the Stock Exchange. Do these functions assist new capital to flow into industry and trade?
5. Write short notes on (*a*) Bulls; (*b*) Bears; (*c*) Contango; and (*d*) Backwardation.

Chapter 7

1. "Foreign trade is merely an extension of the principle of Division of Labour." Explain.
2. Discuss the nature and implications of the Doctrine of Comparative Costs.
3. "In effect, foreign trade is nothing more than a highly organized system of barter which has been unnecessarily complicated." Examine the truth of this statement.
4. What is meant by the term "Balance of Trade"? Under what conditions, if any, can a country maintain a favourable balance of trade over a long period?
5. Write short notes on, (*a*) Free Trade; (*b*) Protection; and (*c*) Imperial Preference.

Chapter 8

1. Describe briefly the various factors that determine the value of one currency expressed in terms of another.
2. "The Purchasing Power Parity Theory is nothing more than an abstraction." Do you agree?
3. Write a short account of the Exchange Equalization Account. What was its purpose?
4. What methods have been adopted in order to exercise some measure of control over variations in the exchange rates?

Chapter 9

1. State and criticize any explanation of the Trade Cycle of which you have knowledge.
2. " The Trade Cycle is inherently a monetary phenomenon." Discuss.
3. " The many theories of the Trade Cycle are not incompatible, they differ merely as to emphasis." Discuss.
4. What, in your view, are the steps to be taken in order to eliminate the fluctuations in trade which occur periodically ?

Chapter 10

1. " A system of taxation should be fair and just." Consider this statement.
2. Discuss the merits and demerits of taxation and borrowing, respectively, as means of financing the War.
3. " Taxation is a powerful weapon in the hands of the State for removing the inequalities in the distribution of incomes." Comment.
4. Discuss the sources of State revenue and comment on their effectiveness.
5. Comment fully on the main principles upon which the British system of taxation is based.

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